



PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

SHEILA C. HOLMAN
Director

TBD

Mr. Tom Copolo
Plant Manager
Duke Energy Progress, LLC – Mayo Electric Generating Plant
10660 Boston Road
Roxboro, North Carolina 27574

SUBJECT: Air Quality Permit No. 03478T45
Facility ID 7300045
Duke Energy Progress, LLC – Mayo Electric Generating Plant
Roxboro, Person County
Fee Class: Title V
PSD Class: Major

Dear Mr. Copolo:

In accordance with your completed Air Quality Permit Applications for renewal of your Title V permit (received September 26, 2014) and renewal/modification of your Title IV Acid Rain permit (received June 26, 2015), we are forwarding herewith Air Quality Permit No. 03478T45 to Duke Energy Progress, LLC - Mayo Electric Generating Plant, Roxboro, North Carolina, authorizing the construction and operation of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS

Mr. Tom Copolo

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150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Person County has been triggered for PSD Increment Tracking for PM₁₀ and SO₂. However, this permit action does not affect these triggered pollutants.

This Air Quality Permit shall be effective from TBD until TBD, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Russell Braswell at 919-707-8731 or russell.braswell@ncdenr.gov.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Heather Ceron, EPA Region 4 (with review)
Connie Horne (cover letter only)
Raleigh Regional Office
Central Files

Insignificant Activities under 15A NCAC 02Q .0503(8)

Emission Source I.D.	Emission Source Description
IS-1	No. 2 fuel oil tank (340,000 gallons maximum capacity)
IS-2.1, IS-2.2, IS-2.3, IS-2.4	Four Lube Oil Tanks
IS-3	Emergency Diesel Generator Fuel Oil Storage Tank (5,000 gallons maximum capacity)
IS-4	Gasoline Storage Tank (1,000 gallons maximum capacity)
IS-6	Emergency Fire Pump Reservoir (220 gallons maximum capacity)
IS-7	Emergency Fire Pump Day Tank (290 gallons maximum capacity)
IS-8	Oily Waste Separator Tank (235 gallons maximum capacity)
IS-9	Used Oil (waste separator) Storage Tank (550 gallons maximum capacity)
IS-10	Kerosene Tank (3,000 gallons maximum capacity)
IS-11	Lube Oil Tank/Bowser (1,150 gallons maximum capacity)
IS-12	Main Turbine Lube Oil Reservoir (14,000 gallons maximum capacity)
IS-13	Fuel Handling Virgin No. 2 Fuel Oil Tank (12,300 gallons maximum capacity)
IS-14	Lube Oil Reservoirs 1A/1B BFP (800 gallons maximum capacity)
IS-15	Cooling towers that do not use chromated chemicals
IS-16	Emergency Diesel Generator Fuel Oil Day Tank (275 gallons maximum capacity)
IS-17	Liquid Caustic Tank (10,000 gallons maximum capacity)
IS-18	Liquid Alum Tank (4,500 gallons maximum capacity)
IS-20 (NSPS, III; MACT, ZZZZ)	No. 2 fuel oil-fired emergency fire pump (315 horsepower maximum capacity)
IQWP (NSPS, III; MACT, ZZZZ)	No. 2 fuel oil-fired emergency quench water pump (175 horsepower maximum capacity)
ILSRH	Limestone pile reclaim hopper
IS-29 (NSPS, JJJJ; MACT, ZZZZ)	Propane-fired emergency generator (31.9 horsepower maximum capacity)
IS-31	One 10,000 Gallon Off-Road Diesel Fuel Tank at Monofill
IS-32	One 10,000 Gallon On-Road Diesel Fuel Tank at Monofill
IS-33.1 and IS-33.2	Two anhydrous ammonia storage tanks (21,890 gallons maximum capacity, each)

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 “Control of Toxic Air Pollutants” or 02Q .0711 “Emission Rates Requiring a Permit”.
3. For additional information regarding the applicability of GACT see the DAQ page titled “The Regulatory Guide for Insignificant Activities/Permits Exempt Activities”. The link to this site is as follows:
<http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide>

Changes Made to Previous Permit

The following changes were made to Air Permit No. 03478T44:

Page(s)*	Section*	Description of Changes
Throughout	Throughout	<ul style="list-style-type: none"> Updated permit numbers/dates Fixed formatting Removed references to CAIR
n/a	Insignificant Activities List	<ul style="list-style-type: none"> Removed portable sources Fixed formatting of source descriptions Fixed MACT/NSPS callouts Removed sources no longer at the facility Removed sources that were never installed at the facility Added two ammonia storage tanks based on information submitted by the applicant
3	Permitted Emission Source list	<ul style="list-style-type: none"> Removed minor modification footnote. Added footnote regarding MACT Subpart ZZZZ
	2.1.A.	<ul style="list-style-type: none"> Removed requirement to establish "normal" visible emissions from several emission sources because the facility has completed this requirement.
	2.1.A.2.	<ul style="list-style-type: none"> Removed references to requirements ending on January 1, 2012.
	2.1.A.4.	<ul style="list-style-type: none"> Removed reporting requirement for this condition per DAQ policy.
	2.1.A.5.	<ul style="list-style-type: none"> Moved CSAPR requirements to this section.
	2.1.A.5. (former)	<ul style="list-style-type: none"> Removed 02D .2500 because this rule has expired.
	2.1.A.8.	<ul style="list-style-type: none"> Minor updates/corrections to MACT Subpart UUUUU permit condition. Removed references to affirmative defense because this section has been removed from the regulation.
	2.1.E.2.c.	<ul style="list-style-type: none"> Removed monitoring/recordkeeping/reporting requirements for the emergency generator.
	2.1.F.1.	<ul style="list-style-type: none"> Removed initial testing requirement because the test has already been completed. Added footnote with the stack test tracking number of the initial performance test.
	2.4.	<ul style="list-style-type: none"> Updated the acid rain permit to include the new NOx averaging plan
	2.5. (former)	<ul style="list-style-type: none"> Moved CSAPR requirements to Section 2.1.A.5.
	2.5.	<ul style="list-style-type: none"> Added section for the Section 112(r) Risk Management Plan. Added RMP requirements to this section.

* This refers to the current permit unless otherwise stated.



State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Issue Date	Expiration Date
03478T45	03478T44	TBD	TBD

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: **Duke Energy Progress, LLC –
Mayo Electric Generating Plant**

Facility ID: **7300045**

Facility Site Location: **10660 Boston Road**
City, County, State, Zip: **Roxboro, Person County, NC 27574**

Mailing Address: **10660 Boston Road**
City, State, Zip: **Roxboro, NC 27574**

Application Numbers: **7300045.14C & .15E**
Complete Application Dates: **September 26, 2014 (.14C)**
June 26, 2015 (.15E)

Primary SIC Code: **4911**
Division of Air Quality, **Raleigh Regional Office**
Regional Office Address: **3800 Barrett Drive, Suite 101**
Raleigh, NC 27609

Permit issued this the TBD.

William D. Willets, P.E., Chief, Permitting Section
By Authority of the Environmental Management Commission

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ATTACHMENTS

List of Acronyms

Acid Rain Permit Application dated April 18, 2014

Phase II NO_x Compliance/Averaging Plan dated June 23, 2015

SECTION 1- PERMITTED EMISSION SOURCE (S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE (S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
	Unit 1A Boiler (NSPS, Subpart D; PSD; MACT, Subpart 5U)	Coal/No. 2 fuel oil/recycled No. 2 fuel oil-fired electric utility boiler (4,512.5 million Btu per hour nominally rated heat input) equipped with low-NO _x burner systems, sodium coal conditioning, alkaline-based fuel additive ² , and halide salts fuel additive	ESP1 and ESP2	Two electrostatic precipitators
			SCR1A ¹	selective catalytic reduction system
			SORB1A	sorbent injection system
			SCRUBBER ¹	Flue Gas Desulfurization limestone slurry tray tower scrubber
	Unit 1B Boiler (NSPS, Subpart D; PSD; MACT, Subpart 5U)	Coal/No. 2 fuel oil/recycled No. 2 fuel oil-fired electric utility boiler (4,512.5 million Btu per hour nominally rated heat input) equipped with low-NO _x burner systems and sodium coal conditioning and alkaline-based fuel additive ² , and halide salts fuel additive	ESP3 and ESP4	Two electrostatic precipitators
			SCR1B ¹	selective catalytic reduction system
			SORB1B	sorbent injection system
			SCRUBBER ¹	Flue Gas Desulfurization limestone slurry tray tower scrubber
Fly Ash Storage and Handling				
	SILO1	Flyash storage silo (76,970 cubic feet capacity)	BF1	Bagfilter (3,810 square feet of filter area)
	SILO1A	Flyash storage silo (76,970 cubic feet capacity)	BF1A	Bagfilter (3,810 square feet of filter area)
	PFTS1	Dry flyash pneumatic transfer system (19,700 pounds per hour nominal process weight rate)	C1	Flyash deceleration cyclone
			BF4	fabric filter (1,050 square feet of filter area)
	PFTS2	Dry flyash pneumatic transfer system (19,700 pounds per hour nominal process weight rate)	C2	Flyash deceleration cyclone
			BF5	fabric filter (1,050 square feet of filter area)
	PFTS3	Dry flyash pneumatic transfer system (19,700 pounds per hour nominal process weight rate)	C3	Flyash deceleration cyclone
			BF13	fabric filter (1,050 square feet of filter area)

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
	PFTS4	Dry flyash pneumatic transfer system (19,700 pounds per hour nominal process weight rate)	C4	Flyash deceleration cyclone
			BF14	fabric filter (1,050 square feet of filter area)
	ES-DFA Load	Dry flyash silo truck loadout	WS1	Wet flyash conditioner
Bottom Ash Storage and Handling				
	ES-SILO8	One bottom ash storage silo (39,500 cubic feet capacity)	CD-BF9	Bagfilter (1,037 square feet of filter area)
	ES-PBTS1	One bottom ash pneumatic transfer system (25,000 pounds per hour nominal process weight rate)	CD-BF10	Bagfilter (1,280 square feet of filter area)
	ES-PBTS2	One bottom ash pneumatic transfer system (25,000 pounds per hour nominal process weight rate)	CD-BF11	Bagfilter (1,280 square feet of filter area)
	ES-PBTS3	One bottom ash pneumatic transfer system (25,000 pounds per hour nominal process weight rate)	CD-BF12	Bagfilter (1,280 square feet of filter area)
	ES-DBA Load	One bottom ash silo truck load-out	N/A	N/A
Coal Storage and Handling				
	SILO2, SILO3, SILO4, SILO5, and SILO6 (NSPS, Subpart Y)	Five coal storage silos (1272 tons capacity each)	BF2	Bagfilter (2,464 square feet of filter area)
	CRUSHER (NSPS, Subpart Y)	Coal crusher (3000 ton per hour nominal rated capacity) with conveyor drop points (ID Nos. CV2, CV9A and CV9B)	BF3	Bagfilter (3,696 square feet of filter area)
	COALDUMP (NSPS, Subpart Y)	Coal unloading operation with wet suppression	N/A	N/A
	CV2 and CV5 (NSPS, Subpart Y)	Two coal conveyors (3000 tons per hour nominal rated capacity each)	N/A	N/A
	CV6 (NSPS, Subpart Y)	Coal conveyor (3000 tons per hour nominal rated capacity each)	N/A	N/A
	CV9A, CV9B, CV10A, and CV10B (NSPS, Subpart Y)	Four coal conveyors (1500 tons per hour nominal rated capacity each)	N/A	N/A

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
	CV12A, CV12B, CV13A, and CV13B (NSPS, Subpart Y)	Four coal conveyors (800 tons per hour nominal rated capacity each)	N/A	N/A
Limestone Receiving, Storage, Transfer, and Grinding				
	LSRSP	Receiving and storage pile	N/A	N/A
	LSL1 (NSPS, Subpart OOO)	Reclaim hopper transfer and belt feeder L1	N/A	N/A
	LSL2 (NSPS, Subpart OOO)	Belt feeder L1 transfer and conveyor L2	N/A	N/A
	LSL2HCG (NSPS, Subpart OOO)	Head chute gate transfer housing for conveyor L2 transfer to conveyor L3	CDLSL2HCG	Fabric filter on transfer housing
	LSL3 (NSPS, Subpart OOO)	Conveyor L3	N/A	N/A
	LSS1A (NSPS, Subpart OOO)	Conveyor L3 transfer and storage silo 1A	CDLSS1A	Fabric filter (1,250 square feet of filter area)
	LSS1B (NSPS, Subpart OOO)	Head chute gate transfer and storage silo 1B	CDLSS1A	Fabric filter (1,250 square feet of filter area)
	LSG1 (NSPS, Subpart OOO)	Wet ball mill grinder in preparation building	N/A	N/A
	LSG2 (NSPS, Subpart OOO)	Wet ball mill grinder in preparation building	N/A	N/A
Miscellaneous				
	WWTBR	Wastewater metals reduction bio-reactor	N/A	N/A
	EMGEN (MACT, Subpart ZZZZ) ³	No. 2 fuel oil-fired emergency-use generator (750 kilowatt maximum capacity)	N/A	N/A
	SILO7	Sodium carbonate storage silo (1700 cubic feet capacity)	BF6	Bin vent filter (120 square feet of filter area)
	ES-SORB1 and ES-SORB2	Two sorbent (lime or hydrated lime) silos (each 9,550 cubic feet capacity)	BF7	bagfilter (679 square feet of filter area)
			BF8	bagfilter (679 square feet of filter area)

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
	ES-SORB4 and ES-SORB5	Two sorbent pneumatic conveying equipment	N/A	N/A
	FHSILOA and FHSIOB	Two dry fuel additive receiving silos, No. 1 and No. 2 (9,550 cubic feet capacity each)	BF-FHSILOA	bagfilter (679 square feet of filter area)
			BF-FHSIOB	bagfilter (679 square feet of filter area)
	HAULRD	Truck Transport	N/A	N/A
	MAMONOH-01 and MAMONOH-02	Truck Unloading	N/A	N/A
	MONO	Monofill (118 acre capacity) ⁴	N/A	N/A
	ES-19	Coal Handling/Storage, Plant Parking Lots, Paved Roads, Unpaved Roads, Coal Pile and Ash Handling	N/A	N/A
	ES-G1A	Gypsum Reversing Conveyor	N/A	N/A
	ES-G1B	Gypsum Reversing Conveyor	N/A	N/A
	ES-G2	Gypsum Conveyor from G1A/B to the Stacking Conveyor	N/A	N/A
	ES-G3	Gypsum Stacking Conveyor	N/A	N/A
	ES-GTL	Gypsum Truck Loadout	N/A	N/A
	ES-GSP	Gypsum Storage Pile	N/A	N/A

- 1 Operated on an as needed basis for NOx and SO2 control.
- 2 Alkaline-based fuel additive may be used on an as-needed basis not to exceed 4 pounds per ton of coal burned. Fuel additives shall not contain any toxic air pollutants listed in 15A NCAC 02Q .0711. Fuel additive products not equivalent to those specified in Application 7300045.10C are not allowed without permit modification.
- 3 According to 40 CFR 63.6590, this rule applies to all stationary reciprocating internal combustion engines. However, according to 40 CFR 63.6590(b)(3)(iii), this source does not have to meet the requirements of this rule.
- 4 For fly ash, bottom ash, gypsum, boiler slag, and other materials, as defined in the Solid Waste Management Facility Permit to Operate 7305- Indus-2012, Duke Energy Progress, LLC - Mayo Electric Generating Plant.

SECTION 2- SPECIFIC LIMITATIONS AND CONDITIONS

2.1- Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

- A. Two coal/No. 2 fuel oil/recycled No. 2 fuel oil-fired electric utility boilers equipped with low-NO_x burner systems, sodium coal conditioning, alkaline-based fuel additive, and halide salts fuel additive (ID Nos. Unit 1A Boiler and Unit 1B Boiler), each exhausting to two electrostatic precipitators operating in parallel (ID Nos. ESP1 and 2 and ESP3 and 4), a selective catalytic reduction system (ID Nos. SCR1A and SCR1B), a sorbent injection system (ID Nos. SORB1A and SORB1B), and a common flue gas desulfurization system (ID No. SCRUBBER)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	See Section 2.1 A.1.a	15A NCAC 02D .0524 (40 CFR Part 60 Subpart D)
	See Section 2.1 A.2.a	15A NCAC 02D .0530 (PSD)
	Phase II Acid Rain Permit Requirements (see Section 2.4)	15A NCAC 02Q .0402 (40 CFR Part 72)
	Federally-Enforceable Only Cross State Air Pollution Rule	40 CFR Part 97, Subpart BBBBB
Nitrogen Oxides	When burning only coal 1.8 pounds per million Btu heat input	15A NCAC 02D .0519
	When burning only oil 0.8 pounds per million Btu heat input	
	When burning both coal and oil See Section 2.1.A.3.	
	See Section 2.1 A.1.a	15A NCAC 02D .0524 (40 CFR Part 60 Subpart D)
	See Section 2.1 A.2.a	15A NCAC 02D .0530 (PSD)
	Phase II Acid Rain Permit Requirements (see Section 2.4)	15A NCAC 02Q .0402 (40 CFR Part 72)
	Federally-Enforceable Only Cross State Air Pollution Rule	40 CFR Part 97, Subparts AAAAA and CCCCC

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	0.10 pounds per million Btu heat input	15A NCAC 02D .0524 (40 CFR Part 60 Subpart D)
	0.10 pounds per million Btu heat input	15A NCAC 02D .0530 (PSD)
Visible Emissions	20 percent opacity (with exceptions, see Section 2.1.A.1.)	15A NCAC 02D .0524 (40 CFR Part 60 Subpart D)
Toxic Air Pollutants	See Section 2.2 B.1. applicable only when evaporating waste EDTA cleaning solution State-enforceable only	15A NCAC 02D .1100
HAPs	See Section 2.1 A.8.	15A NCAC 02D .1111 (40 CFR 63 Subpart UUUUU)
PM _{2.5}	See Sections 2.1 A.6. and 2.1 A.9.	15A NCAC 02Q .0317 (Avoidance of PSD)
-	See Section 2.1 A.7. State-enforceable only	15A NCAC 02Q .0308

**1. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS
(40 CFR PART 60 SUBPART D)**

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements in accordance with 15A NCAC 02D .0524, "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60, Subpart D, including Subpart A "General Provisions."
- b. The following emission limits shall not be exceeded:

POLLUTANT	EMISSION LIMIT (Pounds per million Btu)
Sulfur Dioxide [40 CFR 60.43]	$[y (0.80)+z (1.2)]/(y+z)^*$
Nitrogen Oxides (as NO ₂) [40 CFR 60.44]	$[y (0.30)+z (0.70)]/(y+z)^*$
Particulate Matter [40 CFR 60.42]	0.10
Opacity [40 CFR 60.42]	20 percent opacity (except during periods of startup, shutdown and malfunction) except for one six-minute period per hour of not more than 27 percent opacity

* Where:

y = percentage of total heat input derived from liquid fossil fuel, and

z = percentage of total heat input derived from solid fossil fuel

- c. Any use of the electrostatic precipitator high voltage control Energy Management System (EMS) feature requires a revision to this permit.

Testing [15A NCAC 02Q .0508(f)]

- d. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ, except that notification of testing shall be given 30 days prior to testing in accordance with 40 CFR 60 Subpart

D.

- e. A stack test shall be conducted once per calendar year for particulate matter in accordance with either Method 5 at a sample temperature of $320^{\circ} \pm 25^{\circ}$ F as described in §63.10010(i)(1) or Method 5B of Appendix A of 40 CFR Part 60. In the event that a boiler exceeds 80 percent of its particulate emission limit during the stack test, the Permittee shall schedule and conduct another stack test within six months. Upon demonstration that the source is operating under 80 percent of its particulate limit, as shown by three consecutive semiannual stack tests, the source may resume annual stack tests.

If the result of any test is greater than the limit given in Section 2.1 A.1.b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- f. The Permittee shall install, maintain, and operate a continuous emission monitor system (CEMS) for measuring sulfur dioxide emissions, nitrogen oxide emissions, particulate matter emissions, and either oxygen or carbon dioxide, as per the requirements of 40 CFR Part 75.
- g. Compliance with SO₂ and NO_x emission limits in Section 2.1 A.1.b above shall be determined by averaging hourly continuous emission monitoring system values over any three-hour (rolling) period. The three-hour average shall be the arithmetic average of three contiguous one-hour periods of sulfur dioxide or nitrogen oxides as measured by the continuous emission monitoring system. Missing data shall not be filled nor shall the data be bias adjusted in accordance with 40 CFR Part 75. The minimum number of data points, equally spaced, required to determine a valid hour value shall be determined by 40 CFR Part 75. If any three-hour average exceeds emission limits of Section 2.1 A.1.b above (except during periods of startup, shutdown and malfunction) or records are not maintained, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524. [40 CFR 60.8 and 60.45]
- h. Compliance with the opacity limit in Section 2.1 A.1.b above shall be determined by conducting Method 9 performance tests in accordance with §60.45(b)(7) according to the applicable schedule in §60.45(b)(7)(i). Records shall be maintained according to the requirements specified in §60.45(h) for all Method 9 performance tests required. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the monitoring is not performed, if the monitored values exceed the limitations given above, or if the records are not maintained. For the purposes of this condition, it is not necessary to submit a testing protocol prior to the scheduled test date, as specified in General Condition JJ, if no changes are being made to the most recently approved previous protocol used for Method 9 testing under this condition. If the most recently approved previous protocol is to be used for testing, it shall be submitted with the test report.
- i. Compliance with the particulate matter limit in Section 2.1 A.1.b shall be determined using the PM CEMS.
 - i. Each PM CEMS shall meet the requirements of Performance Specification PS-11 of Appendix B of 40 CFR Part 60; and shall be installed, evaluated, operated, and maintained according to the applicable requirements in §60.49Da(v), §§60.45(b)(5), (b)(7), and (g)(4). The Permittee shall have on file with the director an approved quality assurance program, and shall submit to the director within the time period of his request for his approval a revised quality assurance program to include the provisions of 40 CFR 60, Appendix F, Procedure 2 for the PM CEMS.
 - ii. The PM emission rate shall be determined based on a 24-hour daily (block) average of the hourly arithmetic average emissions concentrations using the CEMS outlet data each boiler operating day, except for data obtained during startup, shutdown, and malfunction. Averages are only calculated for boiler operating days that have valid data for at least 18 hours of unit operation during which the standard applies. Instead, all of the valid hourly emission rates of the operating day(s) not meeting the minimum 18 hours valid data daily average requirement are averaged with all of the valid hourly emission rates of the next boiler operating day with 18 hours or more of valid PM CEMS data to determine compliance. The 24-hour block arithmetic average emission concentration shall be calculated using EPA Reference Method 19 of Appendix A of 40 CFR Part 60, section 12.4.1.
 - iii. At a minimum, valid PM CEMS hourly averages shall be obtained for 75 percent of all operating hours on a 30-day rolling average basis. Valid PM CEMS hourly averages shall be obtained for 90 percent of all operating hours on a 30-day rolling average basis. At least two data points per hour shall be used to calculate each 1-hour arithmetic average.

- iv. The 1-hour arithmetic averages of PM CEMS data shall be expressed in pounds per million Btu and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of Subpart A of 40 CFR Part 60.
- v. All valid PM CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph iii above are not met.
- vi. When PM emissions data are not obtained because of PM CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the DAQ or EPA Reference Method 19 of Appendix A of 40 CFR Part 60 to provide, as necessary, valid emissions data for a minimum of 90 percent of all operating hours per 30-day rolling average.

If the results of the 24-hour daily arithmetic average PM CEMS concentration exceeds the limit in Section 2.1 A.1.b or any of the above requirements are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Reporting [15A NCAC 02Q .0508(f)]

- j. The Permittee shall submit excess emissions and monitoring system performance reports for the sulfur dioxide, nitrogen oxide and particulate matter CEMS, and opacity Method 9 tests. The reports shall be postmarked on or before the 30th day following the end of each calendar year quarter and shall include, as a minimum, the information required in 40 CFR 60.7(c), as follows:
 - i. **Sulfur Dioxide** - Report all three-hour periods of excess emissions (pounds per million Btu) during the reporting period including periods exempted during startup, shutdown and malfunction. Monitor availability values (as calculated for 40 CFR Part 75) for the last hour of the reporting period shall be included.
 - ii. **Nitrogen Oxides** - Report all three-hour periods of excess emissions (pounds per million Btu) during the reporting period including periods exempted during startup, shutdown and malfunction. Monitor availability values (as calculated for 40 CFR Part 75) for the last hour of the reporting period shall be included.
 - iii. **Opacity** - Report the results of all Method 9 performance tests with the excess emissions and monitoring system performance reports.
 - iv. **Particulate Matter** - Report all 24-hour daily (block) average excess emissions (pounds per million Btu) using the CEMS outlet data, including periods exempted during startup, shutdown, and malfunction; within 15 days of a written request, report all PM CEMS hourly averages (in written or electronic format) to show, at a minimum, that valid PM CEMS hourly averages have been obtained for 90 percent of all operating hours on a 30-day rolling average basis.
- k. The results of any stack test shall be reported within 30 days, and the test report shall be submitted within 60 days after the test.
- l. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements in accordance with 15A NCAC 02D .0530, "Prevention of Significant Deterioration" as promulgated in 40 CFR 51.166.
- b. The following emission limits shall not be exceeded:

POLLUTANT	EMISSION LIMIT (pounds/million Btu)
Sulfur Dioxide	$[y(0.80) + z(1.2)]/(y+z)^*$
Nitrogen Oxides (as NO ₂)	$[y(0.30) + z(0.70)]/(y+z)^*$
Particulate Matter	0.10

* Where:

y = percentage of total heat input derived from liquid fossil fuel, and
z = percentage of total heat input derived from solid fossil fuel

- c. To ensure compliance with the above limits, flyash shall not be reinjected into the boilers.
- d. Any use of the electrostatic precipitator high voltage control Energy Management System (EMS) feature requires a revision to this permit.

Testing [15A NCAC 02Q .0508(f)]

- e. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 A.2.b., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.
- f. A stack test shall be conducted for particulate matter in accordance with Section 2.1 A.1.e. If the result of any test is greater than the limit given in Section 2.1 A.2.b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- g. The Permittee shall comply with the applicable monitoring and recordkeeping requirements in Sections 2.1 A.1.f through i to demonstrate compliance with the sulfur dioxide, nitrogen oxides, and particulate matter limits in Section 2.1 A.2.b above. If any three-hour average SO₂ or NO_x emission rate as determined in Section 2.1 A.1.g exceeds the emission limits in Section 2.1 A.2.b above (except during periods of startup, shutdown and malfunction), or the results of the 24-hour daily arithmetic average PM CEMS concentration as determined in Section 2.1 A.1.i exceeds the limit in Section 2.1 A.2.b above, or any of the requirements in Section 2.1 A.1.i are not met, or records are not maintained, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Reporting [15A NCAC 02Q .0508(f)]

- h. The Permittee shall comply with the reporting requirements in Sections 2.1 A.1.j through l.

3. 15A NCAC 02D .0519: CONTROL OF NITROGEN OXIDES EMISSIONS

- a. Emissions of nitrogen oxides from these sources when burning coal and oil (No. 2 fuel oil or recycled No.2 fuel oil) shall be calculated by the following equation:

$$E = \frac{(E_c)(Q_c) + (E_o)(Q_o)}{Q_t}$$

Where:

- E = emission limit for combined burning of coal and oil in **pounds per million Btu heat input**
- E_c = 1.8 pounds per million Btu heat input for coal only
- E_o = 0.8 pounds per million Btu heat input for oil only
- Q_c = coal heat input in Btu per hour
- Q_o = oil heat input in Btu per hour
- Q_t = Q_c + Q_o

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ, except that notification of testing shall be given 30 days prior to testing in accordance with 40 CFR Part 60, Subpart D. If the results of this test are above the limit given in Section 2.1 A.3.a. the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0519.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. The monitoring, recordkeeping, and reporting requirements specified under 15A NCAC 02D .0524 in Sections 2.1 A.1.g and 2.1 A.1.j.ii shall satisfy this requirement. The Permittee shall be deemed in

noncompliance with 15A NCAC 02D .0519 if the monitoring and recordkeeping requirements in Section 2.1 A.1.g are not performed.

STATE-ONLY REQUIREMENT:

4. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS

(Avoidance of 15A NCAC 02Q .0700: TOXIC AIR POLLUTANT PROCEDURES)

- a. The Permittee is avoiding the applicability of Rule 2Q .0700 by using recycled fuels which are equivalent to their virgin counterparts. The Permittee is allowed to burn recycled No. 2 fuel oil for light-off and flame stabilization in the Unit 1A and 1B Boilers. The approved recycled No. 2 fuel oil shall be equivalent to unadulterated fossil fuel by meeting the following criteria:

Constituent/Property	Allowable Level
Arsenic	1 ppm maximum
Cadmium	2 ppm maximum
Chromium	5 ppm maximum
Lead	100 ppm maximum
Total Halogens	1,000 ppm maximum
Flash Point	100°F minimum
Sulfur	0.5 % maximum (by weight)
Ash	1.0 % maximum

It is the Permittee's responsibility to ensure that the recycled No. 2 fuel oil meets the approved criteria for unadulterated fuel and the Permittee will be held responsible for any discrepancies discovered by Division of Air Quality as a result of any sampling and analysis of the used oil.

Testing [15A NCAC 02D .0605]

- b. The DAQ reserves the right to require additional testing and/or monitoring of the recycled fuel oil(s) on an annual basis or without notice.

Monitoring/Recordkeeping [15A NCAC 02D .0605]

- c. The Permittee shall maintain accurate records of the actual amount of vendor approved recycled fuel oil delivered to, and combusted at the facility on an annual basis. These records shall be retained at the facility for a minimum of three years and shall be made available to representatives of the Division of Air Quality upon request.
- d. The Permittee shall maintain records of the results of the analytical testing of the vendor approved recycled No. 2 fuel oil as it is sampled and tested by the supplier (vendor). These records shall be retained at the facility for a minimum of three years and shall be made available to representatives of the Division of Air Quality upon request.

Reporting [15A NCAC 02D .0605]

- e. No reporting is required to demonstrate compliance with this avoidance condition.

Federal-Enforceable Only

5. Cross State Air Pollution Rule Requirements

(40 CFR Part 97, Subparts AAAAA, BBBBB, and CCCCC)

For the two electric utility boilers (**ID Nos. Unit 1A-Boiler and Unit 1B-Boiler**), the Permittee shall comply with all applicable requirements of 40 CFR Part 97, Subpart AAAAA "TR NO_x Annual Trading Program", Subpart BBBBB "TR NO_x Ozone Season Trading Program", and Subpart CCCCC "TR SO₂ Group 1 Trading Program".

6. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS

(Avoidance of 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION)

- a. In order to avoid applicability of 15A NCAC 02D .0530(g), the emissions sources (**ID Nos. Unit 1A Boiler and Unit 1B Boiler**) shall discharge into the atmosphere less than 10 tons of PM_{2.5}⁴ emissions per consecutive 12-month period when injecting activated carbon or similar sorbent in the flue gases of these sources.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.A.6.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508 (f)]

- c. Calculations of PM_{2.5} emissions per month, when injecting activated carbon or similar sorbent in the flue gases of the sources (**ID Nos. Unit 1A Boiler and Unit 1B Boiler**), shall be made at the end of each month. PM_{2.5} emissions per month, when injecting activated carbon or similar sorbent in the flue gases of these sources, shall be determined to be equivalent to the amount of activated carbon or similar sorbent injected during the month. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amount of activated carbon or similar sorbent injected in the flue gases of these sources or the PM_{2.5} emissions when injecting activated carbon or similar sorbent in the flue gases of these sources are not monitored and recorded.
- d. Calculations and the total amount of PM_{2.5} emissions, when injecting activated carbon or similar sorbent in the flue gases of these sources, shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the PM_{2.5} emissions exceed this limit.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a semi-annual summary report⁵, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
- The monthly PM_{2.5} emissions, when injecting activated carbon or similar sorbent in the flue gases of these sources, for the previous 17 months; and;
 - The rolling 12-month total PM_{2.5} emissions for each reported month.

State-only Requirement

7. 15A NCAC 02Q .0308: FINAL ACTION ON PERMIT APPLICATIONS

- a. The Permittee, subject to the conditions and stipulations stated herein, is allowed to burn the following as supplemental fuels in the Unit 1A and 1B Boilers:
- Oils, either petroleum-derived or synthetic, used as a lubricant, hydraulic fluid, metal working fluid and insulating fluid or coolant,
 - Solvents, including acetone, methanol, methyl ethyl ketone, toluene, varsol, xylene, and waste solvent mixtures containing less than 10 percent (by volume) of any non-halogenated solvent not listed above as referenced by 40 CFR 261.31, and
 - Waste ethylene glycol solution antifreeze.
- b. The burning of any of the above materials as supplemental fuel is limited to the following conditions and stipulations:

4 All particulate matter (PM) emissions assumed to be PM_{2.5}.

5 Semi-annual reports shall only be required when the activated carbon or similar sorbent was actually injected during any semi-annual period.

- i. Only those supplemental fuels generated on site may be burned,
 - ii. Total halogen content shall not exceed 1,000 micrograms per gram (parts per million),
 - iii. Total lead content shall not exceed 250 micrograms per gram (parts per million),
 - iv. Total PCB content of any insulating fluid or coolant shall not exceed 49 parts per million,
 - v. Supplemental fuels shall not be burned during periods of start-up, shutdown, or malfunctions,
 - vi. Total supplemental fuel feed rate shall not exceed 300 gallons per hour, and 30,000 gallons per calendar year, and
 - vii. Total supplemental flyash fuel shall be limited to 15,000 tons per calendar year.
- c. The Permittee, subject to the conditions and stipulations stated herein, is allowed to burn waste ammonia/citric acid boiler cleaning solution in the Unit 1A and 1B Boilers. The waste ammonia/citric acid boiler cleaning solution shall be limited to the following maximum injection rates per unit:
- i. Unit 1A Boiler: 275 gallons per minute
 - ii. Unit 1B Boiler: 275 gallons per minute

Monitoring/Recordkeeping/Reporting [15A NCAC 02D .0605]

- d. i. A daily record of the amount of supplemental fuels burned in the boilers shall be maintained on file and open for review by DAQ personnel upon request.
- ii. Chemical analysis conducted on supplemental fuels burned at this facility shall be maintained on file and open for review by DAQ personnel upon request.
- iii. The total amount of waste ammonia/citric acid cleaning solution injected in each boiler must be recorded on a daily basis and the record kept on file for a minimum of two years.
- iv. The Permittee shall notify the DAQ, Raleigh Regional Office, at least five days prior to waste boiler cleaning solution burning.

8. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (40 CFR PART 63, SUBPART UUUUU)

- a. The Permittee shall comply with all applicable provisions, including the requirements for emission limitations, work practice standards, operating limits, testing and initial compliance, continuous compliance, monitoring, recordkeeping, notification, and reporting, contained in Environmental Management Commission Standard 15A NCAC 02D .1111 Maximum Achievable Control Technology (MACT) as promulgated in the most current version of 40 CFR Part 63 Subpart UUUUU, including Subpart A General Provisions.
- b. The Permittee shall comply with all applicable requirements of the Subpart by no later than April 16, 2016. [§63.9984(b)]
- c. The Permittee shall comply with the General Provisions as applicable pursuant to Table 9 to the Subpart. [§63.10040]

Emission Limitations, Work Practice Standards, and Operating Limits [40 CFR 63.9991(a)(1)]

- d. The Permittee shall:
 - i. 1. limit the emissions of filterable particulate matter (PM) to 3.0E-2 lb/MMBtu or 3.0E-1 lb/MWh; or
 - 2. limit the emissions of total non-Hg HAP metals to 5.0E-5 lb/MMBtu or 5.0E-1 lb/GWh; or
 - 3. limit the emissions of individual HAP metals to:

Excerpt from Table 2 to 40 CFR Part 63, Subpart UUUUU

Constituent	Allowable Level
Antimony (Sb)	8.0E-1 lb/TBtu or 8.0E-3 lb/GWh*
Arsenic (As)	1.1E0 lb/TBtu or 2.0E-2 lb/GWh
Beryllium (Be)	2.0E-1 lb/TBtu or

Constituent	Allowable Level
	2.0E-3 lb/GWh
Cadmium (Cd)	3.0E-1 lb/TBtu or 3.0E-3 lb/GWh
Chromium (Cr)	2.8E0 lb/TBtu or 3.0E-2 lb/GWh
Cobalt (Co)	8.0E-1 lb/TBtu or 8.0E-3 lb/GWh
Lead (Pb)	1.2E0 lb/TBtu or 2.0E-2 lb/GWh
Manganese (Mn)	4.0E0 lb/TBtu or 5.0E-2 lb/GWh
Nickel (Ni)	3.5E0 lb/TBtu or 4.0E-2 lb/GWh
Selenium (Se)	5.0E0 lb/TBtu or 6.0E-2 lb/GWh

* Gross output

- ii. 1. limit the emissions of hydrogen chloride (HCl) to 2.0E-3 lb/MMBtu or 2.0E-2 lb/MWh; or
2. limit the emissions of sulfur dioxide (SO₂) to 2.0E-1 lb/MMBtu or 1.5E0 lb/MWh.

- iii. limit the emissions of mercury (Hg) to 1.2E0 lb/TBtu or 1.3E-2 lb/GWh.

[§63.9991(a)(1) and Table 2 to the Subpart]

- e. During periods of startup of an EGU:

- i. The Permittee has chosen to comply using the following work practice standards. By choosing to comply using paragraph (1) of the definition of “startup” in §63.10042, the Permittee shall operate all continuous monitoring systems (CMS) during startup. Startup means either the first-ever firing of fuel in a boiler for the purpose of producing electricity, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on site use). For startup of a unit, clean fuels must be used as defined in §63.10042 for ignition. Once the Unit converts to firing coal, the Permittee shall engage all of the applicable control technologies except dry scrubber and SCR. The Permittee shall start the dry scrubber and SCR systems, if present, appropriately to comply with relevant standards applicable during normal operation. The Permittee shall comply with all applicable emissions limits at all times except for periods that meet the applicable definitions of startup and shutdown in this Subpart. The Permittee shall keep records during startup periods. The Permittee shall provide reports concerning activities and startup periods, as specified in §63.10011(g) and §63.10021(h) and (i).
- ii. If the Permittee chooses to use just one set of sorbent traps to demonstrate compliance with Hg emission limits, the Permittee shall comply with all applicable Hg emission limits at all times; otherwise, the Permittee shall comply with all applicable emission limits at all times except for startup or shutdown periods conforming to this practice.
- iii. The Permittee shall collect monitoring data during startup periods, as specified in §63.10020(a) and (e). Any fraction of an hour in which startup occurs constitutes a full hour of startup. The Permittee shall provide reports concerning activities and startup periods, as specified in §§63.10011(g), 63.10021(i), and 63.10031.

[§63.9991(a)(1) and Table 3 to the Subpart]

- f. Shutdown begins either when none of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including onsite use), or at the point of no fuel being fired in the boiler, whichever is earlier. Shutdown ends when there is both no electricity being generated and no fuel being fired in the boiler. During periods of shutdown of an EGU:
- The Permittee shall operate all CMS during shutdown. The Permittee shall also collect appropriate data, and shall calculate the pollutant emission rate for each hour of shutdown. While firing coal during shutdown, the Permittee shall vent emissions to the main stack(s) and operate all applicable control devices and continue to operate those control devices after the cessation of coal being fed into the EGU and for as long as possible thereafter considering operational and safety concerns. The Permittee shall operate controls when necessary to comply with other applicable standards to the EGU that require operation of the control devices.
 - If, in addition to the fuel used prior to initiation of shutdown, another fuel must be used to support the shutdown process, that additional fuel shall be one or a combination of the clean fuels defined in §63.10042 and shall be used to the maximum extent possible.
 - The Permittee shall comply with all applicable emission limits at all times except during startup periods and shutdown periods, at which time the Permittee shall collect monitoring data during shutdown periods as specified in §63.10020(a). The Permittee shall keep records during shutdown periods, as provided in §§63.10032 and 63.10021(h). Any fraction of an hour in which shutdown occurs constitutes a full hour of shutdown. The Permittee shall provide reports concerning activities and shutdown periods, as specified in §§63.10011(g), 63.10021(i), and 63.10031.

[§63.9991(a)(1), §63.10042, and Table 3 to the Subpart]

General Compliance Requirements [40 CFR 63.10000 and .10001]

- g. The Permittee shall be in compliance with the emission limits and operating limits in the Subpart. These limits shall apply at all times except during periods of startup and shutdown; however, for coal-fired EGUs, the Permittee shall be required to meet the work practice requirements in Table 3 to the Subpart during periods of startup or shutdown. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not meet the applicable emission limits, operating limits, or work practice requirements in this Section 2.1 A.8. h. [§63.10000(a)]
- h. At all times, the Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not meet the requirements in this Section 2.1 A.8.i. [§63.10000(b)]
- i. For coal-fired units, initial performance testing is required for all pollutants for the affected EGUs to demonstrate compliance with the applicable emission limits. The Permittee can use the provision in §63.10005(h) to determine whether the EGU is a low emitting EGU (LEE) for one or more pollutants with certain exemptions. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not perform initial performance testing for all pollutants, as applicable. [§63.10000(c)(1)]
- j. If the coal-fired EGU does not qualify as a LEE for total non-mercury HAP metals, individual non-mercury HAP metals, or filterable particulate matter (PM), the Permittee shall demonstrate compliance through an initial performance test and the Permittee shall monitor continuous performance a PM continuous emission monitoring system (CEMS) or, for an existing EGU, compliance performance testing repeated quarterly. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not demonstrate initial compliance through stack testing, or does not demonstrate continuous compliance through either quarterly performance testing or with a PM CEMS. [§63.10000(c)(1)(iv)]

- k. If the coal-fired EGU does not qualify as a LEE for hydrogen chloride (HCl), the Permittee may choose one of the following options:
- the Permittee may demonstrate initial and continuous compliance through use of an HCl CEMS, installed and operated in accordance with Appendix B to the Subpart; or
 - the Permittee may demonstrate initial and continuous compliance by conducting an initial and periodic quarterly performance stack test for HCl; or
 - the Permittee may demonstrate initial and continuous compliance by installing and operating a sulfur dioxide (SO₂) CEMS installed and operated in accordance with Part 75 of the Chapter to demonstrate compliance with the applicable SO₂ emissions limit.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the HCl CEMS is not installed and operated, or if the initial and periodic quarterly stack tests for HCl are not performed, or if the SO₂ CEMS is not installed and operated. [§63.10000(c)(1)(v)]
- l. If the coal-fired EGU does not qualify as a LEE for Hg, the Permittee shall demonstrate initial and continuous compliance through use of a Hg CEMS or a sorbent trap monitoring system, in accordance with Appendix A to the Subpart. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not demonstrate initial or continuous compliance through use of a Hg CEMS or a sorbent trap monitoring system. [§63.10000(c)(1)(vi)]
- m. As part of demonstration of continuous compliance, the Permittee shall perform periodic tune-ups of affected EGUs, according to §63.10021(e). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not perform periodic tune-ups of affected EGUs. [§63.10000(e)]
- n. The Permittee shall install, certify, operate, maintain, and quality-assure each monitoring system necessary for demonstrating compliance with the work practice standards for PM or non-mercury HAP metals during startup periods and shutdown periods. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if monitoring system for PM or non-mercury HAP metals does not meet the requirements of this Section 2.1 A.8.n.
- o. The Permittee shall collect, record, report, and maintain data obtained from these monitoring systems during startup periods and shutdown periods. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the Permittee does not collect, record, report, and maintain data meeting the requirements of this Section 2.1.A.8.o. [§63.10000(l)]

Testing and Initial Compliance Requirements [40 CFR 63.10005, .10006, and .10011]

- p. If the Permittee installs, certifies, and operates a PM CEMS to demonstrate compliance with a filterable PM emissions limit for coal-fired EGUs, the Permittee shall conduct all applicable periodic emissions tests for filterable PM, individual, or total HAP metals emissions according to Table 5 to the Subpart, §63.10007, and §63.10000(c), except as otherwise provided in §63.10021(d)(1). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not meet the requirements for periodic emissions tests for filterable PM, or individual or total HAP metals emissions in this Section 2.1 A.8.p. [§63.10006(c)]
- q. If the Permittee does not use an SO₂ CEMS to monitor compliance with the alternate equivalent SO₂ emission limit, the Permittee shall conduct all applicable periodic HCl emissions tests according to Table 5 to the Subpart and §63.10007 at least quarterly, except as otherwise provided in §63.10021(d)(1).
- If the Permittee demonstrates that HCl emissions are less than 50% of the emission limit in Table 2 for 3 consecutive years using testing requirements in §63.10007, the unit may qualify for LEE status and reduced testing frequency.
 - If the unit qualifies as a LEE for HCl, the Permittee shall conduct a performance test at least once every 36 calendar months to demonstrate continued LEE status. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not meet the requirements for periodic emissions tests for HCl emissions in this Section 2.1 A.8.q. [§63.10006(d)]
- r. The Permittee shall determine the fuel whose combustion produces the least uncontrolled emissions, taking safety considerations into account, *i.e.*, the cleanest fuel, either natural gas or distillate oil, that is available on site or accessible nearby for use during periods of startup or shutdown. The Permittee shall be deemed

in noncompliance with 15A NCAC 02D .1111 if he/she does not determine the cleanest fuel meeting the requirements of this Section 2.1 A.8.r. [§§63.10011(f)(1) and (2)]

- s. The Permittee shall follow the startup or shutdown requirements as given in Table 3 to the Subpart for each coal-fired EGU and comply with all applicable requirements in §63.10011(g). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not follow startup or shutdown requirements in this Section 2.1 A.8.s. [§§63.10005(j) and 63.10011(g)]

Continuous Compliance Requirements [40 CFR 63.63.10020 and .10021]

- t. The Permittee shall monitor and collect data according to §63.10020. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not monitor or collect data as per the requirements in this Section 2.1 A.8.t. [§63.10020(a)]
- u. The Permittee shall operate the monitoring system and collect data at all required intervals at all times that the affected EGU is operating, except for periods of monitoring system malfunctions or out-of-control periods (see 40 CFR 63.8(c)(7)), and required monitoring system quality assurance or quality control activities, including, as applicable, calibration checks and required zero and span adjustments. The Permittee is required to affect monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not operate the monitoring system or collect data as per the requirements of this Section 2.1 A.8.u. or the monitoring system does not meet the requirements in this Section. [§63.10020(b)]
- v. Except for periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments, any failure to collect required data is a deviation from the monitoring requirements and the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111. [§63.10020(d)]
- w. The Permittee shall demonstrate continuous compliance with each emissions limit, operating limit, and work practice standard in Tables 1 through 4 to the Subpart that applies to the affected unit, according to the monitoring specified in Tables 6 and 7 to the Subpart and paragraphs (b) through (g) of §63.10021(a). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not demonstrate continuous compliance through the requirements in this Section 2.1 A.8.w. [§63.10021(a)]
- x. Except as otherwise provided in §63.10020(c), if the Permittee uses a CEMS to measure SO₂, PM, or Hg emissions, or uses a sorbent trap monitoring system to measure Hg emissions, the Permittee shall demonstrate continuous compliance by using all quality-assured hourly data recorded by the CEMS (or sorbent trap monitoring system) and the other required monitoring systems (e.g., flow rate, CO₂, O₂, or moisture systems) to calculate the arithmetic average emissions rate in units of the standard on a continuous 30-boiler operating day (or, if alternate emissions averaging is used for Hg, 90-boiler operating day) rolling average basis, updated at the end of each new boiler operating day. The Permittee shall use Equation 8 to the Subpart to determine the 30- (or, if applicable, 90) boiler operating day rolling average.

$$\text{Boiler operating day average} = \frac{\sum_{i=1}^n Her_i}{n} \quad (\text{Eq. 8})$$

Where:

Her_i is the hourly parameter value for hour i and n is the number of valid hourly parameter values collected over 30 boiler operating days.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not meet the requirements in this Section 2.1 A.8.x. [§63.10021(b)]

- y. If the Permittee uses quarterly performance testing to demonstrate compliance with one or more applicable emissions limits in Table 1 or 2 to the Subpart, the Permittee shall comply with all applicable requirements of §63.10021(d). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not meet the requirements in this Section 2.1 A.8.y. [§63.10021(d)]
- z. The Permittee shall conduct periodic performance tune-ups of the affected EGU(s), as specified in paragraphs (e)(1) through (9) of §63.10021. Following the first tune-up, the Permittee shall perform an inspection of the burner at least once every 36 calendar months. If your EGU is offline when a deadline to perform the tune-up passes, you shall perform the tune-up work practice requirements within 30 days after the re-start of the affected unit. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not meet the requirements of performance tune-ups included in this Section 2.1 A.4.aa. [§63.10021(e)]

Monitoring [40 CF 63.10010, .10021]

- aa. When an affected unit utilizes a common stack with one or more other affected units, but no non-affected units, the Permittee shall either install the required CEMS and sorbent trap monitoring systems in the duct leading to the common stack from each unit; or install the required CEMS, PM CPMS, and sorbent trap monitoring systems in the common stack. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not meet the requirements in this Section 2.1 A.8.aa. [§63.10010(a)(1)]
- bb. If the Permittee uses an oxygen (O₂) or carbon dioxide (CO₂) CEMS to convert measured pollutant concentrations to the units of the applicable emissions limit, the O₂ or CO₂ concentrations shall be monitored at a location that represents emissions to the atmosphere, *i.e.*, at the outlet of the EGU, downstream of all emission control devices. The Permittee shall install, certify, maintain, and operate the CEMS according to Part 75 of the Chapter. The Permittee shall use only quality-assured O₂ or CO₂ data in the emissions calculations and shall not use Part 75 substitute data values. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not meet the requirements in this Section 2.1 A.8.bb. [§63.10010(b)]
- cc. If the Permittee is required to use a stack gas flow rate monitor (either for routine operation of a sorbent trap monitoring system or to convert pollutant concentrations to units of an electrical output-based emission standard in Table 1 or 2 to the Subpart), the Permittee shall install, certify, operate, and maintain the monitoring system and conduct on-going quality-assurance testing of the system according to Part 75 of the Chapter. The Permittee shall use only unadjusted, quality-assured flow rate data in the emissions calculations. The bias adjustment factors do not apply to the flow rate data and the Permittee shall not use substitute flow rate data in the calculations. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not meet the requirements in this Section 2.1 A.8.cc. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not meet the stack gas flow rate monitoring system requirements in this Section 2.1 A.4.cc. [§63.10010(c)]
- dd. If the Permittee is required to make corrections for stack gas moisture content when converting pollutant concentrations to the units of an emission standard in Table 1 of 2 to the Subpart, the Permittee shall install, certify, operate, and maintain a moisture monitoring system in accordance with Part 75 of the Chapter. Alternatively, the Permittee may use appropriate fuel-specific default moisture values from §75.11(b) of the Chapter to estimate the moisture content of the stack gas or the Permittee may petition the Administrator under §75.66 of the Chapter for use of a default moisture value for non-coal-fired units. If the Permittee installs and operates a moisture monitoring system, the Permittee shall not use substitute moisture data in the emissions calculations. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not meet the moisture monitoring system requirements in this Section 2.1 A.8.dd. [§63.10010(d)]
- ee. If the Permittee uses a Hg CEMS or a sorbent trap monitoring system, the Permittee shall install, certify, operate, maintain and quality-assure the data from the monitoring system in accordance with Appendix A to the Subpart. The Permittee shall comply with all applicable requirements in §63.10010(g) for Hg CEMS.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not meet the Hg CEMS requirements in this Section 2.1 A.8. ee. [§63.10010(g)]

- ff. If the Permittee chooses to comply with the PM filterable emissions limit in lieu of metal HAP limits, the Permittee may choose to install, certify, operate, and maintain a PM CEMS and record the output of the PM CEMS in accordance with §63.10010(i). The compliance limit will be expressed as a 30-boiler operating day rolling average of the numerical emissions limit value applicable to the affected unit in Table 2 to the Subpart. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not meet the PM CEMS requirements in this Section 2.1 A.8. ff. [§63.10010(i)]
- gg. The Permittee shall demonstrate continuous compliance with each emissions limit, operating limit, and work practice standard in Tables 1 through 4 to the Subpart that applies to the affected unit, according to the monitoring specified in Tables 6 and 7 to the Subpart and paragraphs (b) through (g) of §63.10021. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not meet the requirements in this Section 2.1 A.8. gg. [§63.10021(a)]
- hh. The Permittee shall follow the startup or shutdown requirements as given in Table 3 to the Subpart for each coal-fired EGU. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not meet the startup or shutdown requirements in this Section 2.1 A.8. hh. [§63.10021(h)]

Recordkeeping [40 CFR 63.10020, .10032, .10033]

- ii. The Permittee shall keep all applicable records for each period of start-up and each period of shut-down in accordance with the requirements in §63.10020(e). [§63.10020(e)]
- jj. The Permittee shall keep records according to paragraphs (a)(1) and (2) of §63.10032. If the Permittee is required to (or elect to) continuously monitor Hg and/or HCl and/or HF emissions, the Permittee shall also keep the records required under Appendix A and/or Appendix B to the Subpart. [§63.10032(a)]
- kk. For each CEMS, the Permittee shall keep records according to paragraphs (b)(1) through (4) of §63.10032. [§63.10032(b)]
- ll. For each EGU subject to an emission limit, the Permittee shall keep the records in paragraphs (d)(1) through (3) of §63.10032. [§63.10032(d)]
- mm. The Permittee shall keep records of the occurrence and duration of each malfunction of an operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment. [§63.10032(g)]
- nn. The Permittee shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with §63.10000(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [§63.10032(h)]
- oo. The Permittee shall keep records of the type(s) and amount(s) of fuel used during each startup or shutdown. [§63.10032(i)]
- pp. The Permittee shall keep records in a form suitable and readily available for expeditious review, according to §63.10(b)(1). [§63.10033(a)]
- qq. The Permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee shall keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records off site for the remaining 3 years. [§63.10033(b), §63.10033(c), and §63.10(b)(1)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if he/she does not keep the records as included in Sections 2.1 A. 8. ii. through qq. above, or these records are not kept in a form suitable and readily available for expeditious review, or each record is not kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

Reporting [40 CFR 63.10006, .10021, .10030, .10031]

- rr. The Permittee shall report the results of performance tests and performance tune-ups within 60 days after the completion of the performance tests and performance tune-ups. The reports for all subsequent performance tests shall include all applicable information required in §63.10031. [§63.10006(j)]
- ss. The Permittee shall submit the reports required under §63.10031 and, if applicable, the reports required under appendices A and B to the Subpart. The electronic reports required by appendices A and B to the Subpart shall be sent to the Administrator electronically in a format prescribed by the Administrator, as provided in §63.10031. CEMS data (except for PM CEMS and any approved alternative monitoring using a HAP metals CEMS) shall be submitted using EPA's Emissions Collection and Monitoring Plan System (ECMPS) Client Tool. Other data, including PM CEMS data, HAP metals CEMS data, and CEMS performance test detail reports, shall be submitted in the file format generated through use of EPA's Electronic Reporting Tool, the Compliance and Emissions Data Reporting Interface, or alternate electronic file format, all as provided for under §63.10031. [§63.10021(f)]
- tt. The Permittee shall report each instance in which the Permittee did not meet an applicable emissions limit or operating limit in Tables 1 through 4 to the Subpart or failed to conduct a required tune-up. These instances are deemed violations from the requirements of the Subpart and shall be reported according to §63.10031. [§63.10021(g)]
- uu. The Permittee shall submit all of the notifications in §§63.7(b) and (c), 63.8 (e), (f)(4) and (6), and 63.9 (b) through (h), as applicable, by the dates specified. [§63.10030(a)]
- vv. When the Permittee is required to conduct a performance test, the Permittee shall submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin. [§63.10030(d)]
- ww. The Permittee shall submit each report in Table 8 to the Subpart, as applicable. If the Permittee is required to (or elect to) continuously monitor Hg and/or HCl and/or HF emissions, the Permittee shall also submit the electronic reports required under appendix A and/or appendix B to the Subpart, at the specified frequency. [§63.10031(a)]
- xx. Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), the Permittee shall submit each report by the date in Table 8 to the Subpart and according to the requirements in paragraphs (b)(1) through (5) of §63.10031. [§63.10031(b)]
- yy. The compliance report shall contain the information required in paragraphs (c)(1) through (5) of §63.10031. For each excess emissions occurring at an affected source where the Permittee is using a CMS to comply with that emission limit or operating limit, the Permittee shall also include the information required in §63.10(e)(3)(v) in the compliance report specified in §63.10031. [§63.10031(c) and §63.10031(d)]
- zz. Each affected source that has obtained a Title V operating permit pursuant to Part 70 or Part 71 of the Chapter shall report all deviations as defined in the Subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 8 to the Subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in the Subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. Submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. [§63.10031(e)]
- aaa. On or after April 16, 2017, within 60 days after the date of completing each performance test, the Permittee shall submit the performance test reports required by the Subpart to EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). The Permittee shall comply with all applicable requirements in §63.10031(f). [§63.10031(f)]

- bbb. If the Permittee had a malfunction during the reporting period, the compliance report shall include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. [§63.10031(g)]
- ccc. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

9. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS
(Avoidance of 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION)

- a. In order to avoid applicability of 15A NCAC 02D .0530(g), the emissions sources (**ID Nos. Unit 1A Boiler and Unit 1B Boiler**) shall discharge into the atmosphere less than 10 tons of PM_{2.5}⁶ emissions per consecutive 12-month period attributable to halide salts injection with the incoming coal.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.9.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. Calculations of PM_{2.5} emissions from halide salts injection with the incoming coal in the sources (ID Nos. Unit 1A Boiler and Unit 1B Boiler) per month, shall be made at the end of each month. PM_{2.5} emissions per month, when injecting halide salts in the incoming coal, shall be determined to be equivalent to the amount of halide salts injected during the month. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the halide salts injected with the incoming coal, or the PM_{2.5} emissions when injecting halide salts with the incoming coal in these sources, are not monitored and recorded.
- d. Calculations and the total amount of PM_{2.5} emissions due to the injection of halide salts with the incoming coal in these sources shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained..

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a semi-annual summary report⁷ of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
 - i. The monthly PM_{2.5} emissions due to the injection of halide salts with the incoming coal in these sources, for the previous 17 months; and
 - ii. The rolling 12-month total PM_{2.5} emissions for each reported month.

6 All particulate matter (PM) emissions assumed to be PM_{2.5}.

7 Semi-annual reports shall only be required when halide salts were actually injected with the incoming coal during any semi-annual period.

B.

- Flyash storage silo (ID No. SILO1) and associated bagfilter (ID No. BF1),
- Flyash storage silo (ID No. SILO1A) and associated bagfilter (ID No. BF1A),
- Sodium carbonate storage silo (ID No. SILO7) with bin vent filter (ID No. BF6),
- Dry flyash pneumatic transfer system (ID No. PFTS1) with deceleration cyclone (ID No C1) and fabric filter (ID No. BF4),
- Dry flyash pneumatic transfer system (ID No. PFTS2) with deceleration cyclone (ID No C2) and fabric filter (ID No. BF5),
- Dry flyash pneumatic transfer system (ID No. PFTS3) with deceleration cyclone (ID No C3) and fabric filter (ID No. BF13), and
- Dry flyash pneumatic transfer system (ID No. PFTS4) with deceleration cyclone (ID No C4) and fabric filter (ID No. BF14)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	For $P \leq 30$, $E = 4.10 (P)^{0.67}$ For $P > 30$, $E = 55.0 (P)^{0.11} - 40$ Where: E = allowable particulate emission rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Toxic Air Pollutants	See Section 2.2 B.1. State-enforceable only	15A NCAC 02D .1100

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from this source shall not exceed an allowable emission rate as calculated by the following equations:

$$\text{For } P \leq 30, E = 4.10 (P)^{0.67}$$

$$\text{For } P > 30, E = 55.0 (P)^{0.11} - 40$$

Where:

E = allowable emission rate in pounds per hour

P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

- c. Particulate matter emissions from these emissions sources shall be controlled as delineated above. To ensure

that optimum control efficiency is maintained, the Permittee shall perform inspections and maintenance as recommended by the manufacturer implemented in the plant's Work Management System. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:

- i. An annual (for each 12-month period following the initial inspection) internal inspection of the baghouse structural integrity and fabric filters; and
- ii. A monthly visual inspection of each system ductwork and material collection units for leaks.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515, if the ductwork, collection cyclone, and fabric filters are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date and time of actions recorded;
 - ii. The results of each inspection;
 - iii. The results of any maintenance performed on the duct work, collection cyclone, and fabric filter; and
 - iv. Any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f) and 15A NCAC 02Q .0308]

- e. The Permittee shall submit the results of any maintenance performed on the systems within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from these sources shall not be more than **20 percent opacity** (except during startup, shutdowns, and malfunctions approved as such according to procedures approved under 15A NCAC 02D .0535) when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.2.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To assure compliance, once a month the Permittee shall observe the emission points of these sources for any visible emissions above normal. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
 - i. Immediately shutdown the source and repair the malfunction,
 - ii. Be deemed to be in noncompliance with 15A NCAC 02D .0521 or
 - iii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 30 minutes is below the limit given in Section 2.1 B.2.a., above. If the demonstration in Paragraph iii., above, cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date and time of each recorded action;
 - ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. The results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

C.

- **Five coal storage silos (ID Nos. SILO2 through SILO6) with bagfilter (ID No. BF2), and**
- **Coal crusher (ID No. CRUSHER) and three conveyor drop points (ID Nos. CV2, CV9A and CV9B) with bagfilter (ID No. BF3)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	For $P \leq 30$, $E = 4.10 (P)^{0.67}$ For $P > 30$, $E = 55.0 (P)^{0.11} - 40$ Where: E = allowable particulate emission rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity except during periods of startup, shutdown and malfunction	15A NCAC 02D .0524 (40 CFR Part 60, Subpart Y)
Toxic Air Pollutants	See Section 2.2 B.1. State-enforceable Only	15A NCAC 02D .1100

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from these sources shall not exceed an allowable emission rate as calculated by the following equation:

$$\begin{aligned} \text{For } P \leq 30, E &= 4.10 (P)^{0.67} \\ \text{For } P > 30, E &= 55.0 (P)^{0.11} - 40 \end{aligned}$$

Where:

E = allowable emission rate in pounds per hour

P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

- c. Particulate matter emissions from these emission sources shall be controlled as delineated above. To ensure that optimum control efficiency is maintained, the Permittee shall perform inspections and maintenance as recommended by the manufacturer implemented in the plant's Work Management System. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:
- An annual (for each 12-month period following the initial inspection) internal inspection of the bagfilters' structural integrity; and
 - A monthly visual inspection of the system ductwork, and material collection unit for leaks.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilters are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date and time of actions recorded;
 - ii. The results of each inspection;
 - iii. The results of any maintenance performed on the bagfilters; and
 - iv. Any variance from manufacturer's recommendations, if any, and corrections made.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**2. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS
(40 CFR PART 60 SUBPART Y)**

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements in accordance with 15A NCAC 02D .0524, "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60, Subpart Y, including Subpart A "General Provisions."
- b. Visible emissions shall not exceed 20% opacity except during periods of startup, shutdown and malfunction.

Testing [15A NCAC 02Q .0508(f)]

- c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.2.b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring [15A NCAC 02Q .0508(f)]

- d. To assure compliance, once a month the Permittee shall observe the emission points of these sources for any visible emissions above normal. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
 - i. Immediately shutdown the source and repair the malfunction,
 - ii. Deemed to be in noncompliance with 15A NCAC 02D .0524 or
 - iii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 30 minutes is below the limit given in Section 2.1 C.2.b above.If the demonstration in Paragraph iii. above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0524.

Recordkeeping [15A NCAC 02Q .0508(f)]

- e. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date and time of each recorded action;
 - ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. The results of any corrective actions performed.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- f. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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D.

- **Coal unloading operation with wet suppression (ID No. COALDUMP),**
- **Eleven coal conveyors (ID Nos. CV2, CV5, CV6, CV9A, CV9B, CV10A, CV10B, CV12A, CV12B, CV13A and CV13B)**

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Visible Emissions	20 percent opacity except during periods of startup, shutdown and malfunction	15A NCAC 02D .0524 (40 CFR Part 60, Subpart Y)
Toxic Air Pollutants	See Section 2.2 B.1. State-only requirement	15A NCAC 02D .1100

**1. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS
(40 CFR PART 60 SUBPART Y)**

- The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements in accordance with 15A NCAC 02D .0524, "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60, Subpart Y, including Subpart A "General Provisions."
- Visible emissions shall not exceed 20 percent except during periods of startup, shutdown and malfunction.

Testing [15A NCAC 02Q .0508(f)]

- If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.1.b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring [15A NCAC 02Q .0508(f)]

- To assure compliance, once a month the Permittee shall observe the emission points of these sources for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - Immediately shutdown the source and repair the malfunction,
 - Be deemed to be in noncompliance with 15A NCAC 02D .0524 or
 - Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 30 minutes is below the limit given in Section 2.1 D.1.b above. If the demonstration in Paragraph iii. above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0524.

Recordkeeping [15A NCAC 02Q .0508(f)]

- The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - The date and time of each recorded action;
 - The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - The results of any corrective actions performed.
 The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the

requirements of this permit must be clearly identified.

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E. No. 2 fuel oil-fired emergency diesel generator (ID No. EMGEN)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from this source (**ID No. EMGEN**) shall not exceed **2.3 pounds per million Btu heat input**. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.1.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of No. 2 fuel oil in this source (**ID No. EMGEN**).

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from this source (**ID No. EMGEN**) shall not be more than 20 percent opacity (except during startup, shutdowns, and malfunctions approved as such according to procedures approved under 15A NCAC 02D .0535) when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.2.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required to demonstrate compliance for visible emissions from this source (**ID No. EMGEN**).

F. Limestone, Receiving, Storage, Transfer, and Grinding:

- Reclaim hopper transfer and belt feeder L1 (ID No. LSL1)
- Belt feeder L1 transfer and conveyor L2 (ID No. LSL2)
- Head chute gate transfer housing for conveyor L2 transfer to conveyor L3 (ID No. LSL2HCG) with fabric filter (ID No. CDLSL2HCG)
- Conveyor L3 (ID No. LSL3)
- Conveyor L3 transfer and storage silo (ID No. LSS1A) with fabric filter (ID No. CDLSS1A)
- Head chute gate transfer and storage silo (ID No. LSS1B) with fabric filter (ID No. CDLSS1A)
- Wet ball mill grinders in preparation building (ID Nos. LSG1 and LSG2)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	See Section 2.2 A.1	15A NCAC 02D .0510
	0.022 grains per dry standard cubic foot for stack emissions and building vents	15A NCAC 02D .0524 40 CFR Part 60, Subpart OOO
	Control requirements for non-process fugitive dust See Section 2.2 A.2	15A NCAC 02D .0540
Visible Emissions	Seven percent opacity for stack emissions and building vents	15A NCAC 02D .0524 40 CFR Part 60, Subpart OOO
	10 percent opacity for fugitive emissions (Excludes truck dumping to storage pile transfer point and truck and front end loader dumping into feed bin)	15A NCAC 02D .0524 40 CFR Part 60, Subpart OOO
	No visible emissions from buildings, excluding building vents	15A NCAC 02D .0524 40 CFR Part 60, Subpart OOO
Toxic Air Pollutants	See Section 2.2 B.1. State-enforceable Only	15A NCAC 02D .1100

**1. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS
40 CFR PART 60 SUBPART OOO**

- a. The Permittee shall not allow to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions that:
 - i. Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf) [40 CFR 60.672(a)(1)]; and
 - ii Exhibit greater than 7 percent opacity [40 CFR 60.672(a)(2)].
 - iii. Emission sources with stack emissions affected by these requirements include:
 1. Head chute gate transfer housing for conveyor L2 transfer to conveyor L3 (ID No. LSL2HCG) with fabric filter (ID No. CDLSL2HCG),
 2. Conveyor L3 transfer and storage silo 1A (ID No. LSS1A) with fabric filter (ID No. CDLSS1A),
 3. Storage silo 1B (ID No. LSS1B) with fabric filter (ID No. CDLSS1A)
 4. Any vent of any building enclosing any affected emission source including; the below grade enclosure for LSL1 and LSL2, the silo transfer structure, and the reagent preparation building.
- b. The Permittee shall not allow to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions that exhibit greater than 10 percent opacity.
- c. The Permittee shall not allow to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions. Affected buildings include; the below grade enclosure for LSL1 and LSL2, the silo transfer structure, and the reagent preparation building.

Testing [15A NCAC 02Q .0508(f)]

- d. The Permittee has completed the initial performance test required by 40 CFR 60.675.⁸
- e. In addition to initial performance testing, emissions testing may be subsequently required to demonstrate compliance with an applicable permit condition. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.1.b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring [15A NCAC 02Q .0508(f)]

- f. Particulate matter from emission sources shall be controlled by fabric filter as delineated in the equipment list. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. A monthly visual inspection of the system ductwork and bag house for leaks; and
 - ii. An (for each 12-month period following the initial inspection) annual internal inspection of the bag house and ducting for structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the ductwork, baghouse, and fabric filters are not inspected and maintained.

- g. For each emission sources, as listed above in Section 2.1 F., subject to an opacity standard listed, including building enclosures, once a month the Permittee shall observe the emissions point(s) for any visible emissions above normal to assure compliance. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. Immediately shutdown the source and repair the malfunction,
 - ii. Be deemed to be in noncompliance with 15A NCAC 02D .0524 or
 - iii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2601 (Method 9) for 30 minutes is below the limit given above in Section 2.1 F.1. a.ii., b., and c..

If compliance with the applicable limit cannot be demonstrated, the Permittee shall deemed to be in noncompliance with 15A NCAC 02D .0524.

Recordkeeping [15A NCAC 02Q .0508(f)]

- h. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date and time of each recorded action;
 - ii. The results of each inspection;
 - iii. The results of any maintenance performed on the fabric filters, duct work, or baghouse; and
 - iv. Any variance from manufacturer's recommendations, if any, and corrections made.
- i. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date and time of each recorded action;
 - ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. The results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the records in Paragraphs h. and i., above, are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- j. The Permittee shall provide the DAQ at least 30 days prior notice of any performance test to afford the DAQ the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance

8 Test conducted July 14, 2009. Reference number 2009-045ST.

test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the Permittee shall notify the DAQ as soon as possible of any delay in the original test date, either by providing at least seven days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the DAQ by mutual agreement.

[40 CFR 60.8(d)]

- k. The Permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in this permit, including reports of opacity observations made using Method 9 and Method 22 to demonstrate compliance. [40 CFR 60.676(f)]
- l. The Permittee shall submit a summary report of the monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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G. Limestone Receiving and Storage Pile (ID No. LSRSP)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	See Section 2.2 A.1	15A NCAC 02D .0510
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Particulate Matter	See Section 2.2 A.2.	15A NCAC 02D .0540
Toxic Air Pollutants	See Section 2.2 B.1. State-enforceable Only	15A NCAC 02D .1100

1. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from this source (**ID No. LSRSP**) shall not be more than 20 percent opacity (except during startups, shutdowns, and malfunctions) when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 G.1.b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To assure compliance, once a month the Permittee shall observe the emission point (**ID Nos. LSRSP**) for any visible emissions above normal. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
- Immediately shutdown the source and repair the malfunction,
 - Be deemed to be in noncompliance with 15A NCAC 02D .0521 or
 - Demonstrate that the percent opacity from the emission points of the emission sources in accordance with 15A NCAC 02D .2610 (Method 9) for 30 minutes is below the limit given in Section 2.1 G.1.a above.

If the demonstration in Paragraph iii. above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- The date and time of each recorded action;
 - The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - The results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each

calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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H. Dry Flyash Silo Truck Loadout (ID No. ES-DFA Load) and associated Wet Flyash Conditioner (ID No. WS1) [loadout operations from either source ID No. SILO1 or ID No. SILO1A]

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	For $P \leq 30$, $E = 4.10 (P)^{0.67}$ For $P > 30$, $E = 55.0 (P)^{0.11} - 40$ Where: E = allowable emission rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity (except during startups, shutdowns, and malfunctions)	15A NCAC 02D .0521
Toxic Air Pollutants	See Section 2.2 B.1. State-enforceable Only	15A NCAC 02D .1100

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from this source (**ID No. ES-DFA Load**) shall not exceed an allowable emission rate as calculated by the following equations:

$$\text{For } P \leq 30, E = 4.10 (P)^{0.67}$$

$$\text{For } P > 30, E = 55.0 (P)^{0.11} - 40$$

Where:

E = allowable emission rate in pounds per hour

P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 H. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for emissions from this source (**ID No. ES-DFA Load**).

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from this source (**ID No. ES-DFA Load**) shall not be more than 20 percent opacity (except during startups, shutdowns, and malfunctions) when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If

the results of this test are above the limit given in Section 2.1 H.2.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To assure compliance, once a month the Permittee shall observe the emission points of this source (ID No. ES-DFA Load) for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either:
- Immediately shutdown the source and repair the malfunction,
 - Be deemed to be in noncompliance with 15A NCAC 02D .0521 or
 - Demonstrate that the percent opacity from the emission points of the emission sources in accordance with 15A NCAC 02D .2610 (Method 9) for 30 minutes is below the limit given in Section 2.1 H.2.a., above.

If the demonstration in Paragraph iii. above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- The date and time of each recorded action;
 - The results of each observation and/or test noting the source with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - The results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

I.

- **Two Sorbent (lime or hydrated lime) Silos (ID Nos. ES-SORB1 and ES-SORB2) and associated Bagfilters (ID Nos. BF7 and BF8), and**
- **Sorbent Pneumatic Conveying Equipment (ID No. ES-SORB4 and ES-SORB5)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	For $P \leq 30$, $E = 4.10 (P)^{0.67}$ For $P > 30$, $E = 55.0 (P)^{0.11} - 40$ Where: E = allowable emission rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity (except during startups, shutdowns, and malfunctions)	15A NCAC 02D .0521
Toxic Air Pollutants	See Section 2.2 B.1. State-enforceable Only	15A NCAC 02D .1100

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from these sources (**ID Nos. ES-SORB1, ES-SORB2, ES-SORB4 and ES-SORB5**) shall not exceed an allowable emission rate as calculated by the following equations:

$$\text{For } P \leq 30, E = 4.10 (P)^{0.67}$$

$$\text{For } P > 30, E = 55.0 (P)^{0.11} - 40$$

Where:

E = allowable emission rate in pounds per hour

P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.I.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

- c. Particulate matter emissions from the sources (**ID Nos. ES-SORB1 and ES-SORB2**) shall be controlled by the associated bagfilters (**ID Nos. BF7 and BF8**). To ensure that optimum control efficiency is maintained, the Permittee shall perform inspections and maintenance as recommended by the manufacturer implemented in the plant's Work Management System. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:
- An annual (for each 12-month period following the initial inspection) internal inspection of the bagfilters' structural integrity; and
 - A monthly visual inspection of the system ductwork, and material collection unit for leaks.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilters are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date and time of actions recorded;
 - ii. The results of each inspection;
 - iii. The results of any maintenance performed on the bagfilters; and
 - iv. Any variance from manufacturer's recommendations, if any, and corrections made.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from these sources (**ID Nos. ES-SORB1, ES-SORB2, ES-SORB4 and ES-SORB5**) shall not be more than 20 percent opacity (except during startups, shutdowns, and malfunctions) when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 I.2.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To assure compliance, once a month the Permittee shall observe the emission points of these sources (**ID Nos. ES-SORB1, ES-SORB2, ES-SORB4 and ES-SORB5**) for any visible emissions above normal. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
 - i. Immediately shutdown the sources and repair the malfunction,
 - ii. Be deemed to be in noncompliance with 15A NCAC 02D .0521 or
 - iii. Demonstrate that the percent opacity from the emission points of the emission sources in accordance with 15A NCAC 02D .2610 (Method 9) for 30 minutes is below the limit given in Section 2.1 I.2.a., above.

If the demonstration in iii. above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date and time of each recorded action;
 - ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. The results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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J. Two dry fuel additive receiving silos (ID Nos. FHSILOA and FHSIOB) and associated bagfilters (ID Nos. BF-FHSILOA and BF-FHSIOB)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	For $P \leq 30$, $E = 4.10 (P)^{0.67}$ For $P > 30$, $E = 55.0 (P)^{0.11} - 40$ Where: E = allowable emission rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity (except during startups, shutdowns, and malfunctions)	15A NCAC 02D .0521

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from these sources (**ID Nos. FHSILOA and FHSIOB**) shall not exceed an allowable emission rate as calculated by the following equations:

$$\begin{aligned} \text{For } P \leq 30, E &= 4.10 (P)^{0.67} \\ \text{For } P > 30, E &= 55.0 (P)^{0.11} - 40 \end{aligned}$$

Where:

E = allowable emission rate in pounds per hour

P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.J.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

- c. Particulate matter emissions from the sources (**ID Nos. FHSILOA and FHSIOB**) shall be controlled by the associated bagfilters (**ID Nos. BF-FHSILOA and BF-FHSIOB**). To ensure that optimum control efficiency is maintained, the Permittee shall perform inspections and maintenance as recommended by the manufacturer implemented in the plant's Work Management System. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:
- An annual (for each 12-month period following the initial inspection) internal inspection of the bagfilters' structural integrity; and
 - A monthly visual inspection of the system ductwork, and material collection unit for leaks.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilters are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on site and made available to an authorized representative upon request. The logbook shall record the following:
- The date and time of actions recorded;
 - The results of each inspection;

- iii. The results of any maintenance performed on the bagfilters; and
 - iv. Any variance from manufacturer's recommendations, if any, and corrections made.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from these sources (**ID Nos. FHSILOA and FHSILOB**) shall not be more than 20 percent opacity (except during startups, shutdowns, and malfunctions) when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 J.2.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To assure compliance, once a month the Permittee shall observe the emission points of these sources (**ID Nos. FHSILOA and FHSILOB**) for any visible emissions above normal. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
 - i. Immediately shutdown the sources and repair the malfunction,
 - ii. Be deemed to be in noncompliance with 15A NCAC 02D .0521 or
 - iii. Demonstrate that the percent opacity from the emission points of the emission sources in accordance with 15A NCAC 02D .2610 (Method 9) for 30 minutes is below the limit given in Section 2.1 J.2.a., above.

If the demonstration in iii. above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date and time of each recorded action;
 - ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. The results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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- **One bottom ash storage silo (ID No. SILO8) and associated bagfilter (ID No. CD-BF9), and**
- **Three bottom ash pneumatic transfer systems (ID Nos. ES-PBTS1, ES-PBTS2, and ES-PBTS3) and associated bagfilters (ID Nos. CD-BF10, CD-BF11, and CD-BF12)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	For $P \leq 30$, $E = 4.10 (P)^{0.67}$ For $P > 30$, $E = 55.0 (P)^{0.11} - 40$ Where: E = allowable particulate emission rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity (except during startup, shutdowns, and malfunctions)	15A NCAC 02D .0521
Toxic Air Pollutants	See Section 2.2 B.1. State-enforceable Only	15A NCAC 02D .1100

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from these sources (**ID Nos. ES-SILO8, ES-PBTS1, ES-PBTS2, and ES-PBTS3**) shall not exceed an allowable emission rate as calculated by the following equations:

$$\begin{aligned} \text{For } P \leq 30, E &= 4.10 (P)^{0.67} \\ \text{For } P > 30, E &= 55.0 (P)^{0.11} - 40 \end{aligned}$$

Where:

E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 K.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

- c. Particulate matter emissions from these emissions sources (**ID Nos. ES-SILO8, ES-PBTS1, ES-PBTS2, and ES-PBTS3**) shall be controlled by the associated bagfilters (**ID Nos. ES-BF9, ES-BF10, ES-BF11, and ES-BF12**). To ensure that optimum control efficiency is maintained, the Permittee shall perform inspections and maintenance as recommended by the manufacturer implemented in the plant's Work Management System. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:
- An annual (for each 12-month period following the initial inspection) internal inspection of the baghouse structural integrity and fabric filters; and
 - A monthly visual inspection of each system ductwork and material collection units for leaks.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and fabric filters are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date and time of actions recorded;
 - ii. The results of each inspection;
 - iii. The results of any maintenance performed on the duct work and fabric filter; and
 - iv. Any variance from manufacturer's recommendations, if any, and corrections made.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from these sources (**ID Nos. ES-SILO8, ES-PBTS1, ES-PBTS2, and ES-PBTS3**) shall not be more than 20 percent opacity (except during startup, shutdowns, and malfunctions approved as such according to procedures approved under 15A NCAC 02D .0535) when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 K.2.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To assure compliance, once a month the Permittee shall observe the emission points of these sources (**ID Nos. ES-SILO8, ES-PBTS1, ES-PBTS2, and ES-PBTS3**) for any visible emissions above normal. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
 - i. Immediately shutdown the source and repair the malfunction,
 - ii. Be deemed to be in noncompliance with 15A NCAC 02D .0521 or
 - iii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 30 minutes is below the limit given in Section 2.1 K.2.a., above.If the demonstration in iii. above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date and time of each recorded action;
 - ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. The results of any corrective actions performed.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not

maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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L. One bottom ash silo truck load-out (ID No. ES-DBA Load)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	For $P \leq 30$, $E = 4.10 (P)^{0.67}$ For $P > 30$, $E = 55.0 (P)^{0.11} - 40$ Where: E = allowable emission rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity (except during startups, shutdowns, and malfunctions)	15A NCAC 02D .0521
Toxic Air Pollutants	See Section 2.2 B.1. State-enforceable Only	15A NCAC 02D .1100

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from this source (**ID No. ES-DBA Load**) shall not exceed an allowable emission rate as calculated by the following equations:

$$\begin{aligned} \text{For } P \leq 30, E &= 4.10 (P)^{0.67} \\ \text{For } P > 30, E &= 55.0 (P)^{0.11} - 40 \end{aligned}$$

Where:

E = allowable emission rate in pounds per hour

P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 L. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for emissions from this source.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from this source (**ID No. ES-DBA Load**) shall not be more than 20 percent opacity (except during startups, shutdowns, and malfunctions) when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 L.2.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To assure compliance, once a month the Permittee shall observe the emission points of this source (**ID No. ES-DBA Load**) for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either:
- Immediately shutdown the source and repair the malfunction,
 - Be deemed to be in noncompliance with 15A NCAC 02D .0521 or
 - Demonstrate that the percent opacity from the emission points of the emission sources in accordance with 15A NCAC 02D .2610 (Method 9) for 30 minutes is below the limit given in Section 2.1 L.2.a., above.

If the demonstration in iii. above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- The date and time of each recorded action;
 - The results of each observation and/or test noting the source with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - The results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2.2- Multiple Emission Source(s) Specific Limitations and Conditions

A. Limestone, Receiving, Storage, Transfer, and Grinding

- Receiving and storage pile (ID No. LSRSP)
- Reclaim hopper transfer and belt feeder L1 (ID No. LSL1)
- Belt feeder L1 transfer and conveyor L2 (ID No. LSL2)
- Conveyor L2 transfer and L2 head chute gate in transfer housing (ID No. LSL2HCG) with fabric filter (ID No. CDLSL2HCG)
- Head chute gate transfer and conveyor L3 (ID No. LSL3)
- Conveyor L3 transfer and storage silo 1A (ID No. LSS1A) with fabric filter (ID No. CDLSS1A)
- Head chute gate transfer and storage silo 1B (ID No. LSS1B) with fabric filter (ID No. CDLSS1A)
- Wet ball mill grinders in preparation building (ID Nos. LSG1 and LSG2)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	Ambient air quality standards, opacity, and control requirements for non-process fugitive dust pursuant to 15A NCAC 02D .0540	15A NCAC 02D .0510
Particulate Matter	Control requirements for non-process fugitive dust	15A NCAC 02D .0540

1. 15A NCAC 02D .0510: PARTICULATES FROM SAND, GRAVEL, OR CRUSHED STONE OPERATIONS

- a. The Permittee shall not cause, allow, or permit any material in a sand, gravel, or crushed stone operation to be produced, handled, transported or stockpiled without taking measures to reduce to a minimum any particulate matter from becoming airborne to prevent exceeding the ambient air quality standards beyond the property line for particulate matter, both PM10 and total suspended particulates.
- b. Fugitive non-process dust emissions from sand, gravel, or crushed stone operations shall be regulated by Section 2.2 A.2. (15A NCAC 02D .0540).
- c. The Permittee shall control process-generated emissions from conveyors, screens, and transfer points, such that the applicable opacity standards in Section 2.1 F. (15A NCAC 02D .0524 - 40 CFR 60, Subpart OOO) and 2.1 G.1. (15 A NCAC 02D .0521) are not exceeded.

Testing [15A NCAC 02Q .0508(f)]

- d. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If emissions tests are required, the testing shall be performed in accordance with the applicable permit limit. If the results of this test are above the applicable limit, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0510.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall comply with the applicable monitoring/recordkeeping/reporting requirements in 15A NCAC 02D .0521, .0524, and .0540. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0510 if monitoring, recordkeeping, and recordkeeping are not conducted in accordance with the applicable permit condition

2. 15A NCAC 02D .0540: PARTICULATES FROM FUGITIVE NON-PROCESS DUST EMISSION SOURCES

- a. The Permittee shall not cause or allow fugitive non-process dust emissions (i.e., particulate matter that is not

collected by a capture system and is generated from areas such as pit areas, process areas, haul roads, stockpiles, and plant roads) to cause or contribute to substantive complaints (i.e., complaints that are verified with physical evidence acceptable to the DAQ).

- b. If fugitive non-process dust emissions cause or contribute to substantive complaints, the Permittee shall:
 - i. Within 30 days upon receipt of written notification from the Director of a second substantive complaint in a 12-month period, submit to the Director a written description of what has been done and what will be done to reduce fugitive non-process dust emissions from that part of the facility that caused the second substantive complaint;
 - ii. Within 90 days of receipt of written notification from the Director of a second substantive complaint in a 12-month period, submit to the Director a control plan; and
 - iii. Within 30 days after the Director approves the plan, be in compliance with the plan.
- c. The Director may require that the Permittee develop and submit a fugitive non-process dust control plan if:
 - i. Ambient air quality measurements or dispersion modeling acceptable to the DAQ show violation or a potential for a violation of an ambient air quality standard for particulates in 15A NCAC 02D .0400 "Ambient Air Quality Standards;" or
 - ii. If the DAQ observes excessive fugitive non-process dust emissions from the facility beyond the property boundaries.

The control plan shall be submitted to the Director no later than 90 days after notification. The facility shall be in compliance with the plan within 30 days after the Director approves the plan.

- d. A fugitive dust control plan shall:
 - i. Identify the sources of fugitive non-process dust emissions within the facility;
 - ii. Describe how fugitive non-process dust will be controlled from each identified source;
 - iii. Contain a schedule by which the plan will be implemented;
 - iv. Describe how the plan will be implemented, including training of facility personnel; and
 - v. Describe methods to verify compliance with the plan.
- e. The Director shall approve the plan if he finds that:
 - i. The plan contains all required elements;
 - ii. The proposed schedule contained in the plan will reduce fugitive non-process dust emissions in a timely manner;
 - iii. The methods used to control fugitive non-process dust emissions are sufficient to prevent fugitive non-process dust emissions from causing or contributing to a violation of the ambient air quality standards for particulates; and
 - iv. The described compliance verification methods are sufficient to verify compliance with the plan.

If the Director finds that the proposed plan does not meet the requirements, he shall notify the Permittee of any deficiencies in the proposed plan. The Permittee shall have 30 days after receiving written notification from the Director to correct the deficiencies.
- f. If after a plan has been implemented, the Director finds that the plan inadequately controls fugitive non-process dust emissions; he shall require the Permittee to correct the deficiencies in the plan. Within 90 days after receiving written notification from the Director identifying the deficiency, the Permittee shall submit a revision to his plan to correct the deficiencies.

B. Facility Wide

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic Air Pollutant Emissions	Emissions rates modeled to demonstrate compliance with acceptable ambient levels. State-enforceable Only	15A NCAC 02D .1100

State-only Requirement**1. 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS**

Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limits shall not be exceeded:

Emission Source	Toxic Air Pollutant	Emission Limit(s)
Coal Crusher (ID No. CRUSHER)	Arsenic and inorganic arsenic compounds	0.875 lb/yr
	Beryllium	0.543 lb/yr
	Cadmium	0.654 lb/yr
	Manganese and compounds	2.3 lb/day
	Mercury Vapor	5.12×10^{-4} lb/day
	Nickel Metal	0.573 lb/day
Coal Storage Silos (ID Nos. SILO2-SILO6) Combined Limit	Arsenic and inorganic arsenic compounds	0.875 lb/yr
	Beryllium	0.543 lb/yr
	Cadmium	0.654 lb/yr
	Manganese and compounds	2.3 lb/day
	Mercury Vapor	5.12×10^{-4} lb/day
	Nickel Metal	0.573 lb/day
Dry Flyash Pneumatic Transfer System (ID No. PFTS1)	Arsenic and inorganic arsenic compounds	1.07 lb/yr
	Beryllium	1.43 lb/yr
	Cadmium	1.73 lb/yr
	Manganese and compounds	6.06 lb/day
	Mercury Vapor	1.34×10^{-3} lb/day
	Nickel Metal	1.51 lb/day

Emission Source	Toxic Air Pollutant	Emission Limit(s)
	Soluble Chromate Compounds as Chromium VI Equivalent	0.0274 lb/day
Dry Flyash Pneumatic Transfer System (ID No. PFTS2)	Arsenic and inorganic arsenic compounds	1.07 lb/yr
	Beryllium	1.43 lb/yr
	Cadmium	1.73 lb/yr
	Manganese and compounds	6.06 lb/day
	Mercury Vapor	1.34×10^{-3} lb/day
	Nickel Metal	1.51 lb/day
	Soluble Chromate Compounds as Chromium VI Equivalent	0.0274 lb/day
Dry Flyash Pneumatic Transfer System (ID No. PFTS3)	Arsenic and inorganic arsenic compounds	1.07 lb/yr
	Beryllium	1.43 lb/yr
	Cadmium	1.73 lb/yr
	Manganese and compounds	6.06 lb/day
	Mercury Vapor	1.34×10^{-3} lb/day
	Nickel Metal	1.51 lb/day
	Soluble Chromate Compounds as Chromium VI Equivalent	0.0274 lb/day
Dry Flyash Pneumatic Transfer System (ID No. PFTS4)	Arsenic and inorganic arsenic compounds	1.07 lb/yr
	Beryllium	1.43 lb/yr
	Cadmium	1.73 lb/yr
	Manganese and compounds	6.06 lb/day
	Mercury Vapor	1.34×10^{-3} lb/day
	Nickel Metal	1.51 lb/day
	Soluble Chromate Compounds as Chromium VI Equivalent	2.74×10^{-2} lb/day
Flyash Storage Silo (ID No. SILO1)	Arsenic and inorganic arsenic compounds	2.06 lb/yr
	Beryllium	2.75 lb/yr

Emission Source	Toxic Air Pollutant	Emission Limit(s)
	Cadmium	3.31 lb/yr
	Manganese and compounds	11.6 lb/day
	Mercury Vapor	2.58 x 10 ⁻³ lb/day
	Nickel Metal	2.90 lb/day
	Soluble Chromate Compounds as Chromium VI Equivalent	0.0525 lb/day
Flyash Storage Silo (ID No. SILO1A)	Arsenic and inorganic arsenic compounds	2.06 lb/yr
	Beryllium	2.75 lb/yr
	Cadmium	3.31 lb/yr
	Manganese and compounds	11.6 lb/day
	Mercury Vapor	2.58 x 10 ⁻³ lb/day
	Nickel Metal	2.90 lb/day
	Soluble Chromate Compounds as Chromium VI Equivalent	0.0525 lb/day
Conveyor L2 Transfer to Conveyor L3 (ID No. LSL2HCG)	Arsenic and inorganic arsenic compounds	2.52 x 10 ⁻³ lb/yr
	Beryllium	1.46 x 10 ⁻³ lb/yr
	Cadmium	1.53 x 10 ⁻³ lb/yr
	Manganese and compounds	0.120 lb/day
	Mercury Vapor	3.06 x 10 ⁻⁶ lb/day
	Nickel Metal	2.85 x 10 ⁻³ lb/day
Conveyor L3 Transfer and Storage Silo 1A (ID No. LSS1A)	Arsenic and inorganic arsenic compounds	2.52 x 10 ⁻³ lb/yr
	Beryllium	1.46 x 10 ⁻³ lb/yr
	Cadmium	1.53 x 10 ⁻³ lb/yr
	Manganese and compounds	0.120 lb/day
	Mercury Vapor	3.06 x 10 ⁻⁶ lb/day
	Nickel Metal	2.85 x 10 ⁻³ lb/day
Bottom Ash Pneumatic	Arsenic and inorganic arsenic compounds	0.233 lb/yr

Emission Source	Toxic Air Pollutant	Emission Limit(s)
Transfer System (ID No. PBTS1)	Beryllium	1.82 lb/yr
	Cadmium	6.50×10^{-2} lb/yr
	Manganese and compounds	4.31 lb/day
	Mercury Vapor	6.32×10^{-5} lb/day
	Nickel Metal	0.384 lb/day
	Soluble Chromate Compounds as Chromium VI Equivalent	6.08×10^{-2} lb/day
Bottom Ash Pneumatic Transfer System (ID No. PBTS2)	Arsenic and inorganic arsenic compounds	0.233 lb/yr
	Beryllium	1.82 lb/yr
	Cadmium	6.50×10^{-2} lb/yr
	Manganese and compounds	4.31 lb/day
	Mercury Vapor	6.32×10^{-5} lb/day
	Nickel Metal	0.384 lb/day
	Soluble Chromate Compounds as Chromium VI Equivalent	6.08×10^{-2} lb/day
Bottom Ash Pneumatic Transfer System (ID No. PBTS3)	Arsenic and inorganic arsenic compounds	0.233 lb/yr
	Beryllium	1.82 lb/yr
	Cadmium	6.50×10^{-2} lb/yr
	Manganese and compounds	4.31 lb/day
	Mercury Vapor	6.32×10^{-5} lb/day
	Nickel Metal	0.384 lb/day
	Soluble Chromate Compounds as Chromium VI Equivalent	6.08×10^{-2} lb/day
Bottom Ash Silo (ID No. SILO8)	Arsenic and inorganic arsenic compounds	0.216 lb/yr
	Beryllium	1.69 lb/yr
	Cadmium	6.02×10^{-2} lb/yr
	Manganese and compounds	4.0 lb/day

Emission Source	Toxic Air Pollutant	Emission Limit(s)
	Mercury Vapor	5.85×10^{-5} lb/day
	Nickel Metal	0.356 lb/day
	Soluble Chromate Compounds as Chromium VI Equivalent	5.64×10^{-2} lb/day
Sorbent Silo (ID No. ES-SORB1)	Arsenic and inorganic arsenic compounds	3.50×10^{-2} lb/yr
	Beryllium	3.44×10^{-2} lb/yr
	Cadmium	8.37×10^{-2} lb/yr
	Manganese and compounds	1.27 lb/day
	Mercury Vapor	7.91×10^{-5} lb/yr
	Nickel Metal	6.40×10^{-2} lb/day
Electric Utility Boilers (ID Nos. Unit 1A Boiler and Unit 1B Boiler) (total) when evaporating waste EDTA cleaning solution	Arsenic and inorganic arsenic compounds	0.408 lb/yr
	Cadmium	1.71 lb/yr
	Manganese and compounds	4740 lb/day
	Mercury Vapor	3.10 lb/day
	Nickel Metal	1850 lb/day
	Soluble Chromate Compounds as Chromium VI Equivalent	2.58 lb/day
Coal Conveyor (ID No. CV2)	Arsenic and inorganic arsenic compounds	0.197 lb/yr
	Beryllium	0.122 lb/yr
	Cadmium	0.147 lb/yr
	Manganese and compounds	0.516 lb/day
	Mercury Vapor	1.15×10^{-4} lb/day
	Nickel Metal	0.129 lb/day
Coal Conveyor (ID No. CV6)	Arsenic and inorganic arsenic compounds	0.197 lb/yr
	Beryllium	0.122 lb/yr
	Cadmium	0.147 lb/yr
	Manganese and compounds	0.516 lb/day

Emission Source	Toxic Air Pollutant	Emission Limit(s)
	Mercury Vapor	1.15 x 10 ⁻⁴ lb/day
	Nickel Metal	0.129 lb/day
Coal Conveyor (ID No. CV9A or CV9B)	Arsenic and inorganic arsenic compounds	0.197 lb/yr
	Beryllium	0.122 lb/yr
	Cadmium	0.147 lb/yr
	Manganese and compounds	0.516 lb/day
	Mercury Vapor	1.15 x 10 ⁻⁴ lb/day
	Nickel Metal	0.129 lb/day
Coal Conveyor (ID No. CV13A or CV13B)	Arsenic and inorganic arsenic compounds	0.197 lb/yr
	Beryllium	0.122 lb/yr
	Cadmium	0.147 lb/yr
	Manganese and compounds	0.516 lb/day
	Mercury Vapor	1.15 x 10 ⁻⁴ lb/day
	Nickel Metal	0.129 lb/day
Fugitive Emissions from Coal Handling/Storage, Plant Parking Lots, Paved Roads, Unpaved Roads, Coal Pile and Ash Handling (ID No. ES-19)	Arsenic and inorganic arsenic compounds	9.85 x 10 ⁻² lb/yr
	Beryllium	6.11 x 10 ⁻² lb/yr
	Cadmium	7.35 x 10 ⁻² lb/yr
	Manganese and compounds	0.258 lb/day
	Mercury Vapor	5.75 x 10 ⁻⁵ lb/day
	Nickel Metal	6.44 x 10 ⁻² lb/day
Receiving and Storage Pile (ID No. LSRSP)	Arsenic and inorganic arsenic compounds	0.154 lb/yr
	Beryllium	8.88 x 10 ⁻² lb/yr
	Cadmium	9.30 x 10 ⁻² lb/yr
	Manganese and compounds	14.6 lb/day
	Mercury Vapor	3.72 x 10 ⁻⁴ lb/day
	Nickel Metal	0.347 lb/day

Emission Source	Toxic Air Pollutant	Emission Limit(s)
Reclaim Hopper Transfer and Belt Feeder L1 (ID No. LSL1)	Arsenic and inorganic arsenic compounds	8.97×10^{-4} lb/yr
	Beryllium	5.19×10^{-4} lb/yr
	Cadmium	5.43×10^{-4} lb/yr
	Manganese and compounds	4.28×10^{-2} lb/day
	Mercury Vapor	1.09×10^{-6} lb/day
	Nickel Metal	1.02×10^{-3} lb/day
Belt Feeder L1 Transfer and Conveyor L2 (ID No. LSL2)	Arsenic and inorganic arsenic compounds	8.97×10^{-4} lb/yr
	Beryllium	5.19×10^{-4} lb/yr
	Cadmium	5.43×10^{-4} lb/yr
	Manganese and compounds	4.28×10^{-2} lb/day
	Mercury Vapor	1.09×10^{-6} lb/day
	Nickel Metal	1.02×10^{-3} lb/day
Conveyor L3 (ID No. LSL3)	Arsenic and inorganic arsenic compounds	8.97×10^{-4} lb/yr
	Beryllium	5.19×10^{-4} lb/yr
	Cadmium	5.43×10^{-4} lb/yr
	Manganese and compounds	4.28×10^{-2} lb/day
	Mercury Vapor	1.09×10^{-6} lb/day
	Nickel Metal	1.02×10^{-3} lb/day
Gypsum Reversing Conveyor (ID No. ES-G1A or ES-G1B)	Arsenic and inorganic arsenic compounds	3.66×10^{-4} lb/yr
	Cadmium	3.82×10^{-4} lb/yr
	Manganese and compounds	4.48×10^{-2} lb/day
	Mercury Vapor	2.75×10^{-6} lb/day
	Nickel Metal	3.28×10^{-4} lb/day
Gypsum Conveyor from G1A/B to the Stacking Conveyor (ID No. ES-G2)	Arsenic and inorganic arsenic compounds	3.66×10^{-4} lb/yr
	Cadmium	3.82×10^{-4} lb/yr
	Manganese and compounds	4.48×10^{-2} lb/day

Emission Source	Toxic Air Pollutant	Emission Limit(s)
	Mercury Vapor	2.75×10^{-6} lb/day
	Nickel Metal	3.28×10^{-4} lb/day
Gypsum Stacking Conveyor (ID No. ES-G3)	Arsenic and inorganic arsenic compounds	3.66×10^{-4} lb/yr
	Cadmium	3.82×10^{-4} lb/yr
	Manganese and compounds	4.48×10^{-2} lb/day
	Mercury Vapor	2.75×10^{-6} lb/day
	Nickel Metal	3.28×10^{-4} lb/day
Gypsum Truck Load out (ID No. ES-GTL)	Arsenic and inorganic arsenic compounds	3.66×10^{-4} lb/yr
	Cadmium	3.82×10^{-4} lb/yr
	Manganese and compounds	4.48×10^{-2} lb/day
	Mercury Vapor	2.75×10^{-6} lb/day
	Nickel Metal	3.28×10^{-4} lb/day
Gypsum Storage Pile (ID No. ES-GSP)	Arsenic and inorganic arsenic compounds	7.62×10^{-2} lb/yr
	Cadmium	7.97×10^{-2} lb/yr
	Manganese and compounds	18.6 lb/day
	Mercury Vapor	1.14×10^{-3} lb/day
	Nickel Metal	0.137 lb/day
Dry Flyash Silo Truck Load out (ID No. ES-DFA Load)	Arsenic and inorganic arsenic compounds	3.72×10^{-2} lb/yr
	Beryllium	4.93×10^{-2} lb/yr
	Cadmium	5.94×10^{-2} lb/yr
	Manganese and compounds	0.415 lb/day
	Mercury Vapor	8.39×10^{-5} lb/day
	Nickel Metal	9.17×10^{-2} lb/day
	Soluble Chromate Compounds as Chromium VI Equivalent	1.65×10^{-3} lb/day
Bottom Ash Silo Truck	Arsenic and inorganic arsenic compounds	3.09×10^{-3} lb/yr

Emission Source	Toxic Air Pollutant	Emission Limit(s)
Load out (ID No. ES-DBA Load)	Beryllium	2.36×10^{-2} lb/yr
	Cadmium	8.54×10^{-4} lb/yr
	Manganese and compounds	0.441 lb/day
	Mercury, aryl and inorganic compounds	8.65×10^{-6} lb/day
	Nickel Metal	3.53×10^{-2} lb/day
	Soluble Chromate Compounds as Chromium VI Equivalent	5.53×10^{-3} lb/day
Monofill and Truck Unloading [ID Nos. MONO, MAMONOH-01 and MAMONOH-02] Combined Limit	Arsenic and inorganic arsenic compounds	0.73 lb/yr
	Beryllium	1.31 lb/yr
	Cadmium	1.08 lb/yr
	Manganese and compounds	436 lb/day
	Mercury Vapor	5.57 lb/day
	Nickel Metal	90.5 lb/day
	Soluble Chromate Compounds as Chromium VI Equivalent	5.46 lb/day
Wastewater Metals Reduction Bioreactor (ID No. WWTBR)	Hydrogen Sulfide	49.7 lbs/day

Monitoring/Recordkeeping/Reporting [15A NCAC 02D .0611]

- a. The total amount of waste EDTA (as 100% $(\text{NH}_4)_4$ EDTA) evaporated in the electric utility boilers (**ID Nos. Unit 1A Boiler and Unit 1B Boiler**) shall not exceed 98,382 pounds per year. The Permittee shall keep records and report to DAQ as follows:
 - i. The total amount of waste EDTA injected in each boiler in pounds must be recorded on a daily⁹ basis and the record kept on file for a minimum of two years.
 - ii. The Permittee shall notify the DAQ, Raleigh Regional Office, at least five days prior to evaporating waste EDTA cleaning solution.
- b. No monitoring, recordkeeping, or reporting shall apply to any emission sources (excluding Unit 1A Boiler and Unit 1B Boiler) included in Section 2.2 B.1 Table above.

⁹ Daily records are required only on the days when the Permittee is actually injecting waste EDTA in the electric utility boilers (ID Nos. Unit 1A Boiler and Unit 1B Boiler).

2.3- Permit Shield for Non-applicable Requirements

This condition is to clarify that issuance of this permit provides no shield from the Act, or regulations promulgated there under, including state regulations, pertaining to requirements of the New Source Performance Standards or major or minor new source preconstruction review requirements. The permit may be subject to reopening to include a compliance plan and schedule addressing any past or ongoing noncompliance with those provisions for any affected emission units. [40 CFR 70.6(c)(3), 70.6(f) and 70.7(f)]

The Permittee is shielded from the following non-applicable requirements as of the date of issuance of this permit based on information furnished with all previous applications. This shield does not apply to future modifications or changes in the method of operation: [15A NCAC 02Q .0512(a)(1)(B)]

- A. 15A NCAC 02D .0537, Control of Mercury Emissions, is not applicable to the boilers or turbines because it does not apply to fuel combustion sources.
- B. 15A NCAC 02D .0614, Compliance Assurance Monitoring, is not applicable to the boilers due to the addition of PM CEMS for continuous monitoring of emissions.

2.4- Phase II Acid Rain Permit Requirements

ORIS code: 6250

Effective: Same as permit issue/exp dates, TBD

A. Statement of Basis

Statutory and Regulatory Authorities: In accordance with the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended and Titles IV and V of the Clean Air Act, the Division of Air Quality issues this permit pursuant to Title 15A North Carolina Administrative Codes, Subchapter 02Q .0400 and 02Q .0500, and other applicable Laws.

B. SO₂ Allowance Allocations for each affected unit

Boiler ID No.	SO ₂ allowances, under Tables 2, 3, or 4 of 40 CFR part 73.	
	2010 - 2014	2015 and onward
1A	12,807*	*
1B	12,807*	*

- * The number of allowances allocated to Phase II-affected units by U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

C. NO_x Requirements for each affected unit

NO _x Requirements for each affected unit
<p>Pursuant to 40 CFR 76.11, the Division of Air Quality approves one NO_x emissions averaging plan for each unit. The plans are effective from calendar years permit issue/exp TBD.</p> <p>Under each plan, the actual Btu-weighted annual average NO_x emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_x emission rate for the same units had they each been operated, during the same period of time, in compliance with the individual applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for the plan year, then this unit shall be deemed to be in compliance for the year with its alternative contemporaneous annual emission limitation and annual heat input limit.</p> <p>If the designated representative cannot make the above demonstration (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) for the plan year and if this unit fails to meet the annual average alternative contemporaneous emission limitation of 0.25 lb/MMBtu or has an annual heat input less than 10,731,000 MMBtu, then excess emissions of nitrogen oxides occur during the year at this unit. A penalty for excess emissions will be assessed in accordance with 40 CFR 77.6.</p> <p>In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.</p>

D. Comments, Notes and Justifications : None.

E. Phase II Permit Applications and Phase II NO_x Compliance Plan (attached)

The permit applications submitted for this facility, as approved by the Division of Air Quality, are part of this permit. The owners and operators of these Phase II acid rain sources must comply with the standard requirements and special provisions set forth in the following attached applications:

Acid Rain Permit Application dated April 18, 2014

Phase II NO_x Compliance Plan dated June 23, 2015

Phase II NO_x Averaging Plan dated June 23, 2015

DRAFT

2.5- Section 112(r) of the Clean Air Act – Risk Management Plan

15A NCAC 02D .2100: RISK MANAGEMENT PROGRAM

- a. The Permittee is subject to Section 112(r) of the Clean Air Act and shall comply with all applicable requirements in accordance with 40 CFR Part 68.

Recordkeeping/Reporting [15A NCAC 02D .2104]

- b. The Permittee shall submit a Risk Management Plan (RMP) to EPA pursuant to 40 CFR 68.150, or as specified in 40 CFR 68.10.¹⁰
- c. The Permittee shall revise and update the RMP submitted under 40 CFR 68.150 no later than March 25, 2019, and at least every five years after that date or most recent update as required by 40 CFR 68.190(b)(2) through (b)(7), whichever is later.
- d. When the Permittee submits the annual Compliance Certification required by General Condition P, the Permittee shall include a statement that the facility is in compliance with all requirements of 15A NCAC 02D .2100.

¹⁰ At the time this Permit was issued, the Permittee most recently updated the Risk Management Plan on March 25, 2014.

SECTION 3 - GENERAL CONDITIONS (version 4.0 12/17/15)

This section describes terms and conditions applicable to this Title V facility.

A. General Provisions [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. Permit Availability [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. Severability Clause [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. Submissions [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]

The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.

2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]

The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q .0524 and 02Q .0505.

3. Minor Permit Modifications [15A NCAC 02Q .0515]

The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.

4. Significant Permit Modifications [15A NCAC 02Q .0516]

The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.

5. Reopening for Cause [15A NCAC 02Q .0517]

The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Reporting Requirements

Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:

- a. changes in the information submitted in the application;
- b. changes that modify equipment or processes; or
- c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]

- a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
- b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
 - i. the changes are not a modification under Title I of the Federal Clean Air Act;
 - ii. the changes do not cause the allowable emissions under the permit to be exceeded;

- iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
 - iv. the Permittee shall attach the notice to the relevant permit.
 - c. The written notification shall include:
 - i. a description of the change;
 - ii. the date on which the change will occur;
 - iii. any change in emissions; and
 - iv. any permit term or condition that is no longer applicable as a result of the change.
 - d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]

The Permittee may make changes in the operation or emissions without revising the permit if:

 - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
 - b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I. A Reporting Requirements for Excess Emissions and Permit Deviations

[15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

“Excess Emissions” - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (*Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.*)

“Deviations” - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
 - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
 - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
 - name and location of the facility;
 - nature and cause of the malfunction or breakdown;
 - time when the malfunction or breakdown is first observed;
 - expected duration; and
 - estimated rate of emissions;
 - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
 - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
 - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I. B Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. Emergency Provisions [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. the permitted facility was at the time being properly operated;
 - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. Permit Renewal [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A

NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. Need to Halt or Reduce Activity Not a Defense [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. Duty to Provide Information (submittal of information) [15A NCAC 02Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. Duty to Supplement [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. Retention of Records [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. Compliance Certification [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. Certification by Responsible Official [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. Permit Shield for Applicable Requirements [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
 - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
 - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 - c. the applicable requirements under Title IV; or
 - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. Termination, Modification, and Revocation of the Permit [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. Insignificant Activities [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. Property Rights [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. Inspection and Entry [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
 - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
 - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.
2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct,

hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(4)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR § 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) –**
FEDERALLY-ENFORCEABLE ONLY

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an

extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.

- a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
 - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
 - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
 - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
- b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. Reopening for Cause [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
 - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
 - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
 - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540] - STATE ENFORCEABLE ONLY

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust

emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. **Specific Permit Modifications** [15A NCAC 02Q.0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and
 - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period..

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
CSAPR	Cross State Air Pollution Rule
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound

ATTACHMENT 2 to Permit No. 03478T45
Duke Energy Progress, LLC – Mayo Electric Generating Plant

Acid Rain permit application
(Dated April 18, 2014)

DRAFT

Acid Rain Compliance/Averaging Plans
(Dated June 23, 2015)

DRAFT